

Serial Number: 10/580,507

=> FILE HCAPLUS

FILE 'HCAPLUS' ENTERED AT 11:59:45 ON 18 NOV 2008

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 18 Nov 2008 VOL 149 ISS 21

FILE LAST UPDATED: 17 Nov 2008 (20081117/ED)

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> D QUE L450

L1 (	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	PACLITAXEL/CN
L2 (	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	DOXORUBICIN/CN
L3 (	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	EPIRUBICIN/CN
L4 (	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	IRINOTECAN/CN
L5 (	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	VINBLASTINE/CN
L6 (	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	METHOTREXATE/CN
L7 (	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	CISPLATIN/CN
L8 (	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	VALSPODAR/CN
L9 (	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	CYCLOPHOSPHAMIDE/CN
L10 (	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	MITOXANTRONE/CN
L11 (	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	TOPOTECAN/CN
L12 (	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	BISANTRENE/CN
L13 (	12)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	(L1 OR L2 OR L3 OR L4 OR L5 OR L6 OR L7 OR L8 OR L9 OR L10 OR L11 OR L12)
L14 (	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	5-FLUOROURACIL/CN
L15 (	13)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	L13 OR L14
L16 (	92104)SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	L15
L17 (	578)SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	ISOGENIC (2A)CELL
L18 (	29)SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	ISOGENEIC (2A)CELL
L19 (	607)SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	L17 OR L18
L20 (	64)SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	L16 AND L19
L21 (	44)SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	L20 AND (PRY<=2004 OR AY<=2004 OR PY<=2004)
L22 (	74900)SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	DRUG RESISTANCE+NT/CT
L23 (	17)SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	L21 AND L22
L24 (	10917)SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	DRUG RESISTANCE+NT/CT (L) ANTITUMOR
L25 (	4490)SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	L16 AND L24
L26 (	2940)SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	ANIMAL CELL LINE+NT/CT (L)

Serial Number: 10/580,507

MCF-7

L27 (30)SEA FILE=HCAPLUS ABB=ON PLU=ON L25 AND L26
L28 (1)SEA FILE=HCAPLUS ABB=ON PLU=ON L19 AND L27
L29 (16)SEA FILE=HCAPLUS ABB=ON PLU=ON L27 AND (PRY<=2004 OR
AY<=2004 OR PY<=2004)
L30 (15)SEA FILE=HCAPLUS ABB=ON PLU=ON L29 NOT L23
L31 (279735)SEA FILE=HCAPLUS ABB=ON PLU=ON ANTITUMOR AGENTS+OLD/CT
L32 (4405)SEA FILE=HCAPLUS ABB=ON PLU=ON L25 AND L31
L33 (19)SEA FILE=HCAPLUS ABB=ON PLU=ON L19 AND L32
L34 (12)SEA FILE=HCAPLUS ABB=ON PLU=ON L33 AND (PRY<=2004 OR
AY<=2004 OR PY<=2004)
L35 (11)SEA FILE=HCAPLUS ABB=ON PLU=ON L34 NOT L29
L36 (3)SEA FILE=HCAPLUS ABB=ON PLU=ON L35 AND (BREAST OR STATHMIN
OR PROTECTIVE)/TI
L37 (8)SEA FILE=HCAPLUS ABB=ON PLU=ON L30 AND (NUCLEAR OR TUBLIN OR
AMPK OR CRISIS OR MCF-7 OR PROTEOMICS OR BCL-2)/TI
L38 (12)SEA FILE=HCAPLUS ABB=ON PLU=ON L28 OR L36 OR L37
L39 (29)SEA FILE=HCAPLUS ABB=ON PLU=ON L27 AND L31
L40 (21)SEA FILE=HCAPLUS ABB=ON PLU=ON L39 NOT L38
L41 (7)SEA FILE=HCAPLUS ABB=ON PLU=ON L40 AND (PRY<=2004 OR
AY<=2004 OR PY<=2004)
L42 (3)SEA FILE=HCAPLUS ABB=ON PLU=ON L41 AND (TUBULIN OR SMAC-PEPTI
DES OR TRANSPORTER)/TI
L43 15 SEA FILE=HCAPLUS ABB=ON PLU=ON L38 OR L42
L60 (1)SEA FILE=REGISTRY ABB=ON PLU=ON PACLITAXEL/CN
L61 (1)SEA FILE=REGISTRY ABB=ON PLU=ON DOXORUBICIN/CN
L62 (1)SEA FILE=REGISTRY ABB=ON PLU=ON EPIRUBICIN/CN
L63 (1)SEA FILE=REGISTRY ABB=ON PLU=ON 5-FLUOROURACIL/CN
L64 (1)SEA FILE=REGISTRY ABB=ON PLU=ON IRINOTECAN/CN
L65 (1)SEA FILE=REGISTRY ABB=ON PLU=ON VINBLASTINE/CN
L66 (1)SEA FILE=REGISTRY ABB=ON PLU=ON VINBLASTIN/CN
L67 (1)SEA FILE=REGISTRY ABB=ON PLU=ON METHOTREXATE/CN
L68 (1)SEA FILE=REGISTRY ABB=ON PLU=ON CISPLATIN/CN
L69 (1)SEA FILE=REGISTRY ABB=ON PLU=ON VALSPODAR/CN
L70 (1)SEA FILE=REGISTRY ABB=ON PLU=ON CYCLOPHOSPHAMIDE/CN
L71 (1)SEA FILE=REGISTRY ABB=ON PLU=ON MITOXANTRONE/CN
L72 (1)SEA FILE=REGISTRY ABB=ON PLU=ON TOPOTECAN/CN
L73 (1)SEA FILE=REGISTRY ABB=ON PLU=ON BISANTRENE/CN
L74 (13)SEA FILE=REGISTRY ABB=ON PLU=ON (L60 OR L61 OR L62 OR L63 OR
L64 OR L65 OR L66 OR L67 OR L68 OR L69 OR L70 OR L71 OR L72 OR
L73)
L75 (92132)SEA FILE=HCAPLUS ABB=ON PLU=ON L74
L76 (608)SEA FILE=HCAPLUS ABB=ON PLU=ON (ISOGENTIC OR ISOGENEIC) (2A)CEL
L
L77 (15)SEA FILE=HCAPLUS ABB=ON PLU=ON (ISOGENEIC OR ISOGENTIC) (A)
TRANSPLANTATION
L78 (64)SEA FILE=HCAPLUS ABB=ON PLU=ON L75 AND (L76 OR L77)
L79 (44)SEA FILE=HCAPLUS ABB=ON PLU=ON L78 AND (PRY<=2004 OR
AY<=2004 OR PY<=2004)
L80 (74935)SEA FILE=HCAPLUS ABB=ON PLU=ON DRUG RESISTANCE+NT/CT
L81 (17)SEA FILE=HCAPLUS ABB=ON PLU=ON L79 AND L80
L82 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L81 AND (CHEMOTHERAPEUTIC OR
STATHMIN OR MAMMARY OR EXPOSURE)/TI
L450 16 SEA FILE=HCAPLUS ABB=ON PLU=ON L43 OR L82

=> FILE MEDLINE

FILE 'MEDLINE' ENTERED AT 12:00:59 ON 18 NOV 2008

Serial Number: 10/580,507

FILE LAST UPDATED: 15 Nov 2008 (20081115/UP). FILE COVERS 1949 TO DATE.

MEDLINE has been updated with the National Library of Medicine's revised 2008 MeSH terms. See HELP RLOAD for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

See HELP RANGE before carrying out any RANGE search.

MEDLINE Accession Numbers (ANs) for records from 1950-1977 have been converted from 8 to 10 digits. Searches using an 8 or 10 digit AN will retrieve the same record. The 10-digit ANs can be expanded, searched, and displayed in all records from 1949 to the present.

=> D QUE L139

```
L105(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  PACLITAXEL/CN
L106(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  DOXORUBICIN/CN
L107(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  EPIRUBICIN/CN
L108(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  5-FLUOROURACIL/CN
L109(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  IRINOTECAN/CN
L110(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  VINBLASTINE/CN
L111(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  VINBLASTIN/CN
L112(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  METHOTREXATE/CN
L113(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  CISPLATIN/CN
L114(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  VALSPODAR/CN
L115(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  CYCLOPHOSPHAMIDE/CN
L116(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  MITOXANTRONE/CN
L117(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  TOPOTECAN/CN
L118(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  BISANTRENE/CN
L119(     13)SEA FILE=REGISTRY ABB=ON  PLU=ON  (L105 OR L106 OR L107 OR
      L108 OR L109 OR L110 OR L111 OR L112 OR L113 OR L114 OR L115
      OR L116 OR L117 OR L118)
L120(    138826)SEA FILE=MEDLINE ABB=ON  PLU=ON  L119
L121(      602)SEA FILE=MEDLINE ABB=ON  PLU=ON  (ISOGENIC OR ISOGENEIC) (2A)CEL
      L
L122(    177085)SEA FILE=MEDLINE ABB=ON  PLU=ON  DRUG RESISTANCE+NT/CT
L123(    10163)SEA FILE=MEDLINE ABB=ON  PLU=ON  L120 AND L122
L124(    24902)SEA FILE=MEDLINE ABB=ON  PLU=ON  BREAST+NT/CT
L125(      12)SEA FILE=MEDLINE ABB=ON  PLU=ON  L123 AND L124
L126(    157270)SEA FILE=MEDLINE ABB=ON  PLU=ON  BREAST NEOPLASMS+NT/CT
L127(      53)SEA FILE=MEDLINE ABB=ON  PLU=ON  L120 AND L121
L128(      5)SEA FILE=MEDLINE ABB=ON  PLU=ON  L126 AND L127
L129(      5)SEA FILE=MEDLINE ABB=ON  PLU=ON  L128 NOT L125
L130(      3)SEA FILE=MEDLINE ABB=ON  PLU=ON  L129 AND (MICROARRAY OR
      CROSS-RESISTANCE)
L131(      2)SEA FILE=MEDLINE ABB=ON  PLU=ON  L130 NOT OPTIMIZATION
L132(    663791)SEA FILE=MEDLINE ABB=ON  PLU=ON  IN VITRO
L133(      8)SEA FILE=MEDLINE ABB=ON  PLU=ON  L127 AND L132
L134(      1)SEA FILE=MEDLINE ABB=ON  PLU=ON  L133 AND XENOGRAFT/TI
L135(     15)SEA FILE=MEDLINE ABB=ON  PLU=ON  L121 AND L123
L136(      8)SEA FILE=MEDLINE ABB=ON  PLU=ON  L135 AND PY<=2004
L137(      2)SEA FILE=MEDLINE ABB=ON  PLU=ON  L136 AND EVIDENCE/TI
L138(      1)SEA FILE=MEDLINE ABB=ON  PLU=ON  L137 NOT MYELOMA/TI
L139(      3)SEA FILE=MEDLINE ABB=ON  PLU=ON  L131 OR L134 OR L138
```

=> FILE BIOSIS

FILE 'BIOSIS' ENTERED AT 12:01:08 ON 18 NOV 2008

Copyright (c) 2008 The Thomson Corporation

Serial Number: 10/580,507

FILE COVERS 1926 TO DATE.
CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT
FROM JANUARY 1926 TO DATE.

RECORDS LAST ADDED: 13 November 2008 (20081113/ED)

BIOSIS has been augmented with 1.8 million archival records from 1926 through 1968. These records have been re-indexed to match current BIOSIS indexing.

=> D QUE L326

L140(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	PACLITAXEL/CN
L141(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	DOXORUBICIN/CN
L142(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	EPIDUBICIN/CN
L143(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	5-FLUOROURACIL/CN
L144(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	IRINOTECAN/CN
L145(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	VINBLASTINE/CN
L146(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	VINBLASTIN/CN
L147(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	METHOTREXATE/CN
L148(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	CISPLATIN/CN
L149(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	VALSPODAR/CN
L150(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	CYCLOPHOSPHAMIDE/CN
L151(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	MITOXANTRONE/CN
L152(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	TOPOTECAN/CN
L153(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	BISANTRENE/CN
L154(	13)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	(L140 OR L141 OR L142 OR L143 OR L144 OR L145 OR L146 OR L147 OR L148 OR L149 OR L150 OR L151 OR L152 OR L153)
L155(	163678)	SEA	FILE=BIOSIS	ABB=ON	PLU=ON L154
L156(	884)	SEA	FILE=BIOSIS	ABB=ON	PLU=ON ISOGENIC (5A)CELL
L157(	461)	SEA	FILE=BIOSIS	ABB=ON	PLU=ON DRUG RESISTANCE/CT
L158(	62)	SEA	FILE=BIOSIS	ABB=ON	PLU=ON L155 AND L156
L159(	109571)	SEA	FILE=BIOSIS	ABB=ON	PLU=ON NEOPLASMS/CT
L160(	7)	SEA	FILE=BIOSIS	ABB=ON	PLU=ON L158 AND L159
L161(	72513)	SEA	FILE=BIOSIS	ABB=ON	PLU=ON BREAST NEOPLASMS/CT
L162(	4)	SEA	FILE=BIOSIS	ABB=ON	PLU=ON L158 AND L161
L163(	4)	SEA	FILE=BIOSIS	ABB=ON	PLU=ON L162 NOT L160
L164(	42386)	SEA	FILE=BIOSIS	ABB=ON	PLU=ON DRUG RESISTANCE
L165(	42386)	SEA	FILE=BIOSIS	ABB=ON	PLU=ON L157 OR L164
L166(	475611)	SEA	FILE=BIOSIS	ABB=ON	PLU=ON NEOPLASM
L167(	57579)	SEA	FILE=BIOSIS	ABB=ON	PLU=ON CYST OR NEOPLASTIC PROCESSES OR NEOPLASTIC SYNDROME OR PARANEOPLASTIC SYNDROME OR TUMOR VIRUS INFECTION
L168(	529702)	SEA	FILE=BIOSIS	ABB=ON	PLU=ON L166 OR L167
L169(	3716)	SEA	FILE=BIOSIS	ABB=ON	PLU=ON L165 AND L168
L170(	1420)	SEA	FILE=BIOSIS	ABB=ON	PLU=ON L155 AND L169
L171(	4)	SEA	FILE=BIOSIS	ABB=ON	PLU=ON L156 AND L170
L172(	2)	SEA	FILE=BIOSIS	ABB=ON	PLU=ON L171 AND (ESTROGEN OR OVEREXPRE SSION)
L173(	74456)	SEA	FILE=BIOSIS	ABB=ON	PLU=ON ADENOCARCINOMA
L174(	72850)	SEA	FILE=BIOSIS	ABB=ON	PLU=ON BREAST NEOPLASM
L175(	2444)	SEA	FILE=BIOSIS	ABB=ON	PLU=ON UTERINE NEOPLASM
L176(	282)	SEA	FILE=BIOSIS	ABB=ON	PLU=ON L170 AND L174
L177(	2)	SEA	FILE=BIOSIS	ABB=ON	PLU=ON L176 AND ISOGENIC
L178(	1)	SEA	FILE=BIOSIS	ABB=ON	PLU=ON L176 AND L156
L179(	2)	SEA	FILE=BIOSIS	ABB=ON	PLU=ON L177 OR L178
L180(	2)	SEA	FILE=BIOSIS	ABB=ON	PLU=ON L170 AND L175
L181(	2)	SEA	FILE=BIOSIS	ABB=ON	PLU=ON L180 NOT L179
L182(	28)	SEA	FILE=BIOSIS	ABB=ON	PLU=ON L156 AND L173

Serial Number: 10/580,507

L183(	28)SEA FILE=BIOSIS ABB=ON	PLU=ON	L182 NOT (L172 OR L179 OR L180 OR L181)
L184(	2)SEA FILE=BIOSIS ABB=ON	PLU=ON	L165 AND L183
L185(	2)SEA FILE=BIOSIS ABB=ON	PLU=ON	L184 NOT (L172 OR L179 OR L180 OR L181)
L186(	1)SEA FILE=BIOSIS ABB=ON	PLU=ON	L185 AND INDUCTION/TI
L187(	6)SEA FILE=BIOSIS ABB=ON	PLU=ON	L172 OR L179 OR L180 OR L181 OR L186
L188	16	SEA FILE=BIOSIS ABB=ON	PLU=ON L160 OR L163 OR L187
L189(	1)SEA FILE=REGISTRY ABB=ON	PLU=ON	PACLITAXEL/CN
L190(	1)SEA FILE=REGISTRY ABB=ON	PLU=ON	DOXORUBICIN/CN
L191(	1)SEA FILE=REGISTRY ABB=ON	PLU=ON	EPIRUBICIN/CN
L192(	1)SEA FILE=REGISTRY ABB=ON	PLU=ON	5-FLUOROURACIL/CN
L193(	1)SEA FILE=REGISTRY ABB=ON	PLU=ON	IRINOTECAN/CN
L194(	1)SEA FILE=REGISTRY ABB=ON	PLU=ON	VINBLASTINE/CN
L195(	1)SEA FILE=REGISTRY ABB=ON	PLU=ON	VINBLASTIN/CN
L196(	1)SEA FILE=REGISTRY ABB=ON	PLU=ON	METHOTREXATE/CN
L197(	1)SEA FILE=REGISTRY ABB=ON	PLU=ON	CISPLATIN/CN
L198(	1)SEA FILE=REGISTRY ABB=ON	PLU=ON	VALSPODAR/CN
L199(	1)SEA FILE=REGISTRY ABB=ON	PLU=ON	CYCLOPHOSPHAMIDE/CN
L200(	1)SEA FILE=REGISTRY ABB=ON	PLU=ON	MITOXANTRONE/CN
L201(	1)SEA FILE=REGISTRY ABB=ON	PLU=ON	TOPOTECAN/CN
L202(	1)SEA FILE=REGISTRY ABB=ON	PLU=ON	BISANTRENE/CN
L203(	13)SEA FILE=REGISTRY ABB=ON	PLU=ON	(L189 OR L190 OR L191 OR L192 OR L193 OR L194 OR L195 OR L196 OR L197 OR L198 OR L199 OR L200 OR L201 OR L202)
L204(	163678)SEA FILE=BIOSIS ABB=ON	PLU=ON	L203
L205(	884)SEA FILE=BIOSIS ABB=ON	PLU=ON	ISOGENIC (5A)CELL
L206(	461)SEA FILE=BIOSIS ABB=ON	PLU=ON	DRUG RESISTANCE/CT
L207(	62)SEA FILE=BIOSIS ABB=ON	PLU=ON	L204 AND L205
L208(	109571)SEA FILE=BIOSIS ABB=ON	PLU=ON	NEOPLASMS/CT
L209(	7)SEA FILE=BIOSIS ABB=ON	PLU=ON	L207 AND L208
L210(	72513)SEA FILE=BIOSIS ABB=ON	PLU=ON	BREAST NEOPLASMS/CT
L211(	4)SEA FILE=BIOSIS ABB=ON	PLU=ON	L207 AND L210
L212(	4)SEA FILE=BIOSIS ABB=ON	PLU=ON	L211 NOT L209
L213(	42386)SEA FILE=BIOSIS ABB=ON	PLU=ON	DRUG RESISTANCE
L214(	42386)SEA FILE=BIOSIS ABB=ON	PLU=ON	L206 OR L213
L215(	475611)SEA FILE=BIOSIS ABB=ON	PLU=ON	NEOPLASM
L216(	57579)SEA FILE=BIOSIS ABB=ON	PLU=ON	CYST OR NEOPLASTIC PROCESSES OR NEOPLASTIC SYNDROME OR PARANEOPLASTIC SYNDROME OR TUMOR VIRUS INFECTION
L217(	529702)SEA FILE=BIOSIS ABB=ON	PLU=ON	L215 OR L216
L218(	3716)SEA FILE=BIOSIS ABB=ON	PLU=ON	L214 AND L217
L219(	1420)SEA FILE=BIOSIS ABB=ON	PLU=ON	L204 AND L218
L220(	4)SEA FILE=BIOSIS ABB=ON	PLU=ON	L205 AND L219
L221(	2)SEA FILE=BIOSIS ABB=ON	PLU=ON	L220 AND (ESTROGEN OR OVEREXPRESSSION)
L222(	74456)SEA FILE=BIOSIS ABB=ON	PLU=ON	ADENOCARCINOMA
L223(	72850)SEA FILE=BIOSIS ABB=ON	PLU=ON	BREAST NEOPLASM
L224(	2444)SEA FILE=BIOSIS ABB=ON	PLU=ON	UTERINE NEOPLASM
L225(	282)SEA FILE=BIOSIS ABB=ON	PLU=ON	L219 AND L223
L226(	2)SEA FILE=BIOSIS ABB=ON	PLU=ON	L225 AND ISOGENIC
L227(	1)SEA FILE=BIOSIS ABB=ON	PLU=ON	L225 AND L205
L228(	2)SEA FILE=BIOSIS ABB=ON	PLU=ON	L226 OR L227
L229(	2)SEA FILE=BIOSIS ABB=ON	PLU=ON	L219 AND L224
L230(	2)SEA FILE=BIOSIS ABB=ON	PLU=ON	L229 NOT L228
L231(	28)SEA FILE=BIOSIS ABB=ON	PLU=ON	L205 AND L222
L232(	28)SEA FILE=BIOSIS ABB=ON	PLU=ON	L231 NOT (L221 OR L228 OR L229 OR L230)
L233(	2)SEA FILE=BIOSIS ABB=ON	PLU=ON	L214 AND L232

Serial Number: 10/580,507

L234(	2)SEA FILE=BIOSIS ABB=ON	PLU=ON	L233 NOT (L221 OR L228 OR L229 OR L230)
L235(	1)SEA FILE=BIOSIS ABB=ON	PLU=ON	L234 AND INDUCTION/TI
L236(	6)SEA FILE=BIOSIS ABB=ON	PLU=ON	L221 OR L228 OR L229 OR L230 OR L235
L237(	16)SEA FILE=BIOSIS ABB=ON	PLU=ON	L209 OR L212 OR L236
L238(	137117)SEA FILE=BIOSIS ABB=ON	PLU=ON	CLONE
L239(	52)SEA FILE=BIOSIS ABB=ON	PLU=ON	L205 AND L238
L240(	3)SEA FILE=BIOSIS ABB=ON	PLU=ON	L204 AND L239
L241(	3)SEA FILE=BIOSIS ABB=ON	PLU=ON	L240 NOT L237
L242	19 SEA FILE=BIOSIS ABB=ON	PLU=ON	L237 OR L241
L243(	1)SEA FILE=REGISTRY ABB=ON	PLU=ON	PACLITAXEL/CN
L244(	1)SEA FILE=REGISTRY ABB=ON	PLU=ON	DOXORUBICIN/CN
L245(	1)SEA FILE=REGISTRY ABB=ON	PLU=ON	EPIRUBICIN/CN
L246(	1)SEA FILE=REGISTRY ABB=ON	PLU=ON	5-FLUOROURACIL/CN
L247(	1)SEA FILE=REGISTRY ABB=ON	PLU=ON	IRINOTECAN/CN
L248(	1)SEA FILE=REGISTRY ABB=ON	PLU=ON	VINBLASTINE/CN
L249(	1)SEA FILE=REGISTRY ABB=ON	PLU=ON	VINBLASTIN/CN
L250(	1)SEA FILE=REGISTRY ABB=ON	PLU=ON	METHOTREXATE/CN
L251(	1)SEA FILE=REGISTRY ABB=ON	PLU=ON	CISPLATIN/CN
L252(	1)SEA FILE=REGISTRY ABB=ON	PLU=ON	VALSPODAR/CN
L253(	1)SEA FILE=REGISTRY ABB=ON	PLU=ON	CYCLOPHOSPHAMIDE/CN
L254(	1)SEA FILE=REGISTRY ABB=ON	PLU=ON	MITOXANTRONE/CN
L255(	1)SEA FILE=REGISTRY ABB=ON	PLU=ON	TOPOTECAN/CN
L256(	1)SEA FILE=REGISTRY ABB=ON	PLU=ON	BISANTRENE/CN
L257(	13)SEA FILE=REGISTRY ABB=ON	PLU=ON	(L243 OR L244 OR L245 OR L246 OR L247 OR L248 OR L249 OR L250 OR L251 OR L252 OR L253 OR L254 OR L255 OR L256)
L258(	163678)SEA FILE=BIOSIS ABB=ON	PLU=ON	L257
L259(	884)SEA FILE=BIOSIS ABB=ON	PLU=ON	ISOGENIC (5A) CELL
L260(	461)SEA FILE=BIOSIS ABB=ON	PLU=ON	DRUG RESISTANCE/CT
L261(	62)SEA FILE=BIOSIS ABB=ON	PLU=ON	L258 AND L259
L262(	109571)SEA FILE=BIOSIS ABB=ON	PLU=ON	NEOPLASMS/CT
L263(	7)SEA FILE=BIOSIS ABB=ON	PLU=ON	L261 AND L262
L264(	72513)SEA FILE=BIOSIS ABB=ON	PLU=ON	BREAST NEOPLASMS/CT
L265(	4)SEA FILE=BIOSIS ABB=ON	PLU=ON	L261 AND L264
L266(	4)SEA FILE=BIOSIS ABB=ON	PLU=ON	L265 NOT L263
L267(	42386)SEA FILE=BIOSIS ABB=ON	PLU=ON	DRUG RESISTANCE
L268(	42386)SEA FILE=BIOSIS ABB=ON	PLU=ON	L260 OR L267
L269(	475611)SEA FILE=BIOSIS ABB=ON	PLU=ON	NEOPLASM
L270(	57579)SEA FILE=BIOSIS ABB=ON	PLU=ON	CYST OR NEOPLASTIC PROCESSES OR NEOPLASTIC SYNDROME OR PARANEOPLASTIC SYNDROME OR TUMOR VIRUS INFECTION
L271(	529702)SEA FILE=BIOSIS ABB=ON	PLU=ON	L269 OR L270
L272(	3716)SEA FILE=BIOSIS ABB=ON	PLU=ON	L268 AND L271
L273(	1420)SEA FILE=BIOSIS ABB=ON	PLU=ON	L258 AND L272
L274(	4)SEA FILE=BIOSIS ABB=ON	PLU=ON	L259 AND L273
L275(	2)SEA FILE=BIOSIS ABB=ON	PLU=ON	L274 AND (ESTROGEN OR OVEREXPRESSION)
L276(	74456)SEA FILE=BIOSIS ABB=ON	PLU=ON	ADENOCARCINOMA
L277(	72850)SEA FILE=BIOSIS ABB=ON	PLU=ON	BREAST NEOPLASM
L278(	2444)SEA FILE=BIOSIS ABB=ON	PLU=ON	UTERINE NEOPLASM
L279(	282)SEA FILE=BIOSIS ABB=ON	PLU=ON	L273 AND L277
L280(	2)SEA FILE=BIOSIS ABB=ON	PLU=ON	L279 AND ISOGENIC
L281(	1)SEA FILE=BIOSIS ABB=ON	PLU=ON	L279 AND L259
L282(	2)SEA FILE=BIOSIS ABB=ON	PLU=ON	L280 OR L281
L283(	2)SEA FILE=BIOSIS ABB=ON	PLU=ON	L273 AND L278
L284(	2)SEA FILE=BIOSIS ABB=ON	PLU=ON	L283 NOT L282
L285(	28)SEA FILE=BIOSIS ABB=ON	PLU=ON	L259 AND L276
L286(	28)SEA FILE=BIOSIS ABB=ON	PLU=ON	L285 NOT (L275 OR L282 OR L283

Serial Number: 10/580,507

OR L284)
L287(2)SEA FILE=BIOSIS ABB=ON PLU=ON L268 AND L286
L288(2)SEA FILE=BIOSIS ABB=ON PLU=ON L287 NOT (L275 OR L282 OR L283
OR L284)
L289(1)SEA FILE=BIOSIS ABB=ON PLU=ON L288 AND INDUCTION/TI
L290(6)SEA FILE=BIOSIS ABB=ON PLU=ON L275 OR L282 OR L283 OR L284
OR L289
L291(16)SEA FILE=BIOSIS ABB=ON PLU=ON L263 OR L266 OR L290
L292(17723)SEA FILE=BIOSIS ABB=ON PLU=ON PACLITAXEL OR 7 EPI TAXOL OR
ANZATAX OR BRIS TAXOL OR NSC-125973 OR PAXENE OR PRAXEL OR
TAXOL OR TAXOL A
L293(45461)SEA FILE=BIOSIS ABB=ON PLU=ON DOXORUBICIN OR ADRIABLASTIN OR
ADRIABLASTINE OR ADRIAMYCIN OR ADRIBLASTIN OR ADRIBLASTINA OR
ADRIBLASTINE OR ADRIMEDAC OR CAELYX OR DOX SL OR DOXIL OR DOXO
CELL OR DOXOLEM
L294(544)SEA FILE=BIOSIS ABB=ON PLU=ON (DOXORUBICIN (2A) (HEXAL OR NC
OR HYDROCHLORIDE)) OR (DOXORUBICINA (2A) (FERRER FARM OR FUNK
OR TEDEC)) OR DOXOTEC OR FARMIBLASTINA OR MYOCET OR ONKODOX OR
RIBODOXO OR RIBOSEPHARM OR RUBEX
L295(45473)SEA FILE=BIOSIS ABB=ON PLU=ON L293 OR L294
L296(4888)SEA FILE=BIOSIS ABB=ON PLU=ON EPIRUBICIN OR (EPI (2A)
(ADRIAMYCIN OR DOXORUBICIN OR DXR)) OR EPIADRIAMYCIN OR
EPIDOXORUBICIN OR ELLENCE OR EPILEM OR EPIRUBICIN HYDROCHLORIDE
OR FARMORUBICIN OR FARMORUBICINA OR FARMORUBICINE OR NSC-25694
2 OR PHARMORUBICIN
L297(29206)SEA FILE=BIOSIS ABB=ON PLU=ON FLUOROURACIL OR FLUOROURACIL-BI
OSYN OR ADRUCIL OR CARAC OR EFUDEX OR EFUDIX OR FLUOROPLEX OR
(FLUOROURACIL (2A) (MONONITRATE OR (MONOPOTASSIUM OR MONOSODIUM
OR POTASSIUM) (A) SALT))
L298(0)SEA FILE=BIOSIS ABB=ON PLU=ON (FLUOROURACIL (2A) (GRY OR
DAKOTA)) OR FLURACEDYL OR FLURODEX OR HAEMATO-FU OR NEOFLUOR
OR RIBOFLUOR
L299(3404)SEA FILE=BIOSIS ABB=ON PLU=ON IRINOTECAN OR CAMPTOSAR OR
CAMPTOTHECIN 11 OR IRINOTECAN HYDROCHLORIDE OR IRRINOTECAN OR
SN 38 OR SN 38 11
L300(12050)SEA FILE=BIOSIS ABB=ON PLU=ON VINBLASTINE OR CELLBLASTIN OR
VINBLASTINE SULFATE OR VELBAN OR VELBE OR VINBLASTIN HEXAL OR
VINBLASTINA LILLY
L301(36566)SEA FILE=BIOSIS ABB=ON PLU=ON METHOTREXATE OR AMETHOPTERIN
OR (METHOTREXATE (2A) (HYDRATE OR (DICESIUM OR DISODIUM OR
SODIUM) (A) SALT)) OR MEXATE
L302(34536)SEA FILE=BIOSIS ABB=ON PLU=ON CISPLATIN OR BIOCISPLATINUM OR
CIS PLATINUM DICHLORODIAMMINEPLATINUM OR NSC-119875 OR
PLATIDIAM OR PLATINO OR PLATINOL OR PLATINUM DIAMMINODICHLORIDE
L303(742)SEA FILE=BIOSIS ABB=ON PLU=ON VALSPODAR OR KETO BMT 1 VAL 2
CYCLOSPORIN A OR PSC 833 OR PSC833
L304(48264)SEA FILE=BIOSIS ABB=ON PLU=ON CYCLOPHOSPHAMIDE OR CYCLOPHOSPH
AMIDE MONOHYDRATE OR CYCLOPHOSPHANE OR CYTOPHOSPHAN OR CYTOXAN
OR ENDOXAN OR NEOSAR OR NSC-26271 OR PROCYTOX OR SENDOXAN
L305(5668)SEA FILE=BIOSIS ABB=ON PLU=ON MITOXANTRONE OR MITOXANTRONE
(2A) (HYDROCHLORIDE OR ACETATE) OR MITOZANTRONE MITROXONE OR
NOVANTRON OR NOVANTRONE OR NSC-279836 OR NSC-287836 OR
NSC-299195 NSC-301739 OR NSC-301739D OR PRALIFAN OR RALENOVA
L306(2060)SEA FILE=BIOSIS ABB=ON PLU=ON TOPOTECAN OR HYCANTAMINE OR
HYCANTIN OR NOGITECAN HYDROCHLORIDE OR NSC-609699 OR TOPOTECAN
HYDROCHLORIDE
L307(189)SEA FILE=BIOSIS ABB=ON PLU=ON BISANTRENE OR BISANTRENE
DIHYDROCHLORIDE OR CL 216942 OR CL216 942 OR NSC 337766
L308(176937)SEA FILE=BIOSIS ABB=ON PLU=ON (L292 OR L293 OR L294 OR L295

Serial Number: 10/580,507

OR L296 OR L297 OR L298 OR L299 OR L300 OR L301 OR L302 OR
L303 OR L304 OR L305 OR L306 OR L307)

L309(1150)SEA FILE=BIOSIS ABB=ON PLU=ON (ISOGENIC OR ISOGENEIC) (7A)
CELL
L310(91)SEA FILE=BIOSIS ABB=ON PLU=ON L308 AND L309
L311(42386)SEA FILE=BIOSIS ABB=ON PLU=ON DRUG RESISTANCE
L312(19)SEA FILE=BIOSIS ABB=ON PLU=ON L310 AND L311
L313(12)SEA FILE=BIOSIS ABB=ON PLU=ON L312 AND PY<=2004
L314(9)SEA FILE=BIOSIS ABB=ON PLU=ON L313 NOT L291
L315(165905)SEA FILE=BIOSIS ABB=ON PLU=ON (BREAST OR MAMMARY) (2A)
(NEOPLASM OR CANCER OR TUMOR OR CYSTS)
L316(40685)SEA FILE=BIOSIS ABB=ON PLU=ON (UTERINE OR ENDOMETRIAL OR
CERVICAL) (2A) (NEOPLASM OR CANCER OR TUMOR OR CYSTS)
L317(2)SEA FILE=BIOSIS ABB=ON PLU=ON L314 AND (L315 OR L316)
L318(18)SEA FILE=BIOSIS ABB=ON PLU=ON L291 OR L317
L319(365329)SEA FILE=BIOSIS ABB=ON PLU=ON ANTITUMOR OR ANTICANCER OR
ANTINEOPLASTIC
L320(165)SEA FILE=BIOSIS ABB=ON PLU=ON L309 AND L319
L321(70)SEA FILE=BIOSIS ABB=ON PLU=ON L308 AND L320
L322(12)SEA FILE=BIOSIS ABB=ON PLU=ON L321 AND (L315 OR L316)
L323(10)SEA FILE=BIOSIS ABB=ON PLU=ON L322 NOT L313
L324(5)SEA FILE=BIOSIS ABB=ON PLU=ON L323 NOT L291
L325 23 SEA FILE=BIOSIS ABB=ON PLU=ON L324 OR L318
L326 26 SEA FILE=BIOSIS ABB=ON PLU=ON L188 OR L242 OR L325

=> FILE EMBASE

FILE 'EMBASE' ENTERED AT 12:01:39 ON 18 NOV 2008

Copyright (c) 2008 Elsevier B.V. All rights reserved.

FILE COVERS 1974 TO 18 Nov 2008 (20081118/ED)

EMBASE was reloaded on March 30, 2008.

EMBASE is now updated daily. SDI frequency remains weekly (default)
and biweekly.

This file contains CAS Registry Numbers for easy and accurate
substance identification.

Beginning January 2008, Elsevier will no longer provide EMTREE
codes as part of the EMTREE thesaurus in EMBASE. Please update
your current-awareness alerts (SDIs) if they contain EMTREE
codes.

For further assistance, please contact your local helpdesk.

=> D QUE L406

L327(1)SEA FILE=REGISTRY ABB=ON PLU=ON PACLITAXEL/CN
L328(1)SEA FILE=REGISTRY ABB=ON PLU=ON DOXORUBICIN/CN
L329(1)SEA FILE=REGISTRY ABB=ON PLU=ON EPIRUBICIN/CN
L330(1)SEA FILE=REGISTRY ABB=ON PLU=ON 5-FLUOROURACIL/CN
L331(1)SEA FILE=REGISTRY ABB=ON PLU=ON IRINOTECAN/CN
L332(1)SEA FILE=REGISTRY ABB=ON PLU=ON VINBLASTINE/CN
L333(1)SEA FILE=REGISTRY ABB=ON PLU=ON VINBLASTIN/CN
L334(1)SEA FILE=REGISTRY ABB=ON PLU=ON METHOTREXATE/CN
L335(1)SEA FILE=REGISTRY ABB=ON PLU=ON CISPLATIN/CN
L336(1)SEA FILE=REGISTRY ABB=ON PLU=ON VALSPODAR/CN
L337(1)SEA FILE=REGISTRY ABB=ON PLU=ON CYCLOPHOSPHAMIDE/CN
L338(1)SEA FILE=REGISTRY ABB=ON PLU=ON MITOXANTRONE/CN

Serial Number: 10/580,507

L339(1)SEA FILE=REGISTRY ABB=ON PLU=ON TOPOTECAN/CN
L340(1)SEA FILE=REGISTRY ABB=ON PLU=ON BISANTRENE/CN
L341(13)SEA FILE=REGISTRY ABB=ON PLU=ON (L327 OR L328 OR L329 OR
L330 OR L331 OR L332 OR L333 OR L334 OR L335 OR L336 OR L337
OR L338 OR L339 OR L340)
L342(288235)SEA FILE=EMBASE ABB=ON PLU=ON L341
L343(927)SEA FILE=EMBASE ABB=ON PLU=ON (ISOGENIC OR ISOGENEIC) (7A)CELL

L344(139079)SEA FILE=EMBASE ABB=ON PLU=ON DRUG RESISTANCE+NT/CT
L345(1576209)SEA FILE=EMBASE ABB=ON PLU=ON NEOPLASM+NT/CT
L346(89)SEA FILE=EMBASE ABB=ON PLU=ON L342 AND L343
L347(16)SEA FILE=EMBASE ABB=ON PLU=ON L346 AND L344
L348(13)SEA FILE=EMBASE ABB=ON PLU=ON L347 AND L345
L349(9)SEA FILE=EMBASE ABB=ON PLU=ON L348 AND PY<=2004
L350 3 SEA FILE=EMBASE ABB=ON PLU=ON L349 AND (RECENT OR UROEPITHELI
AL OR LOSS)/TI
L351(1)SEA FILE=REGISTRY ABB=ON PLU=ON PACLITAXEL/CN
L352(1)SEA FILE=REGISTRY ABB=ON PLU=ON DOXORUBICIN/CN
L353(1)SEA FILE=REGISTRY ABB=ON PLU=ON EPIRUBICIN/CN
L354(1)SEA FILE=REGISTRY ABB=ON PLU=ON 5-FLUOROURACIL/CN
L355(1)SEA FILE=REGISTRY ABB=ON PLU=ON IRINOTECAN/CN
L356(1)SEA FILE=REGISTRY ABB=ON PLU=ON VINBLASTINE/CN
L357(1)SEA FILE=REGISTRY ABB=ON PLU=ON VINBLASTIN/CN
L358(1)SEA FILE=REGISTRY ABB=ON PLU=ON METHOTREXATE/CN
L359(1)SEA FILE=REGISTRY ABB=ON PLU=ON CISPLATIN/CN
L360(1)SEA FILE=REGISTRY ABB=ON PLU=ON VALSPODAR/CN
L361(1)SEA FILE=REGISTRY ABB=ON PLU=ON CYCLOPHOSPHAMIDE/CN
L362(1)SEA FILE=REGISTRY ABB=ON PLU=ON MITOXANTRONE/CN
L363(1)SEA FILE=REGISTRY ABB=ON PLU=ON TOPOTECAN/CN
L364(1)SEA FILE=REGISTRY ABB=ON PLU=ON BISANTRENE/CN
L365(13)SEA FILE=REGISTRY ABB=ON PLU=ON (L351 OR L352 OR L353 OR
L354 OR L355 OR L356 OR L357 OR L358 OR L359 OR L360 OR L361
OR L362 OR L363 OR L364)
L366(288235)SEA FILE=EMBASE ABB=ON PLU=ON L365
L367(927)SEA FILE=EMBASE ABB=ON PLU=ON (ISOGENIC OR ISOGENEIC) (7A)CELL

L368(139079)SEA FILE=EMBASE ABB=ON PLU=ON DRUG RESISTANCE+NT/CT
L369(1576209)SEA FILE=EMBASE ABB=ON PLU=ON NEOPLASM+NT/CT
L370(89)SEA FILE=EMBASE ABB=ON PLU=ON L366 AND L367
L371(16)SEA FILE=EMBASE ABB=ON PLU=ON L370 AND L368
L372(13)SEA FILE=EMBASE ABB=ON PLU=ON L371 AND L369
L373(9)SEA FILE=EMBASE ABB=ON PLU=ON L372 AND PY<=2004
L374(3)SEA FILE=EMBASE ABB=ON PLU=ON L373 AND (RECENT OR UROEPITHELI
AL OR LOSS)/TI
L375(158539)SEA FILE=EMBASE ABB=ON PLU=ON (BREAST OR MAMMARY) (2A)
(NEOPLASM OR CANCER OR TUMOR OR CYST)
L376(35856)SEA FILE=EMBASE ABB=ON PLU=ON (UTERINE OR ENDOMETRIAL OR
CERVICAL) (2A) (NEOPLASM OR CANCER OR TUMOR OR CYST)
L377(164648)SEA FILE=EMBASE ABB=ON PLU=ON ANTITUMOR OR ANTICANCER OR
ANTINEOPLASTIC
L378(927)SEA FILE=EMBASE ABB=ON PLU=ON (ISOGENIC OR ISOGENEIC) (7A)CELL

L379(61)SEA FILE=EMBASE ABB=ON PLU=ON L378 AND (L375 OR L376)
L380(8)SEA FILE=EMBASE ABB=ON PLU=ON L379 AND L377
L381(3)SEA FILE=EMBASE ABB=ON PLU=ON L380 NOT (PTEN OR NOVEL OR
CHALCONE OR TACHPYRIDINE OR ENFORCED OR FLAVOPIRIDOL)
L382(2)SEA FILE=EMBASE ABB=ON PLU=ON L381 NOT RH1
L383(5)SEA FILE=EMBASE ABB=ON PLU=ON L374 OR L382
L384(31865)SEA FILE=EMBASE ABB=ON PLU=ON PACLITAXEL OR ANZATAX OR
NSC-125973 OR PAXENE OR PRAXEL OR TAXOL OR TAXOL A

Serial Number: 10/580,507

L385(89667)SEA FILE=EMBASE ABB=ON PLU=ON DOXORUBICIN OR ADRIABLASTIN OR
ADRIABLASTINE OR ADRIAMYCIN OR ADRIBLASTIN OR ADRIBLASTINA OR
ADRIBLASTINE OR ADRIMEDAC OR CAELYX OR DOX SL OR DOXIL OR DOXO
CELL

L386(662)SEA FILE=EMBASE ABB=ON PLU=ON DOXOLEM OR (DOXORUBICIN (2A)
(HEXAL OR NC OR HYDROCHLORIDE)) OR (DOXORUBICINA (2A)(FERRER
FARM OR FUNK OR TEDEC)) OR DOXOTEC OR FARMIBLASTINA OR MYOCET
OR ONKODOX OR RIBODOXO OR RIBOSEPHARM OR RUBEX

L387(89699)SEA FILE=EMBASE ABB=ON PLU=ON L385 OR L386

L388(13129)SEA FILE=EMBASE ABB=ON PLU=ON EPIRUBICIN OR (EPI (2A)
(ADRIAMYCIN OR DOXORUBICIN OR DXR)) OR EPIADRIAMYCIN OR
EPIDOXORUBICIN OR ELLENCE OR EPILEM OR EPIRUBICIN HYDROCHLORIDE
OR FARMORUBICIN OR FARMORUBICINA OR FARMORUBICINE OR NSC-25694
2 OR PHARMORUBICIN

L389(65984)SEA FILE=EMBASE ABB=ON PLU=ON FLUOROURACIL OR FLUOROURACIL-BI
OSYN OR ADRUCIL OR CARAC OR EFUDEX OR EFUDIX OR FLUOROPLEX OR
(FLUOROURACIL (2A)(MONONITRATE OR (MONOPOTASSIUM OR MONOSODIUM
OR POTASSIUM) (A) SALT))

L390(10992)SEA FILE=EMBASE ABB=ON PLU=ON IRINOTECAN OR CAMPTOSAR OR
CAMPTOTHECIN 11 OR IRINOTECAN HYDROCHLORIDE OR IRRINOTECAN OR
SN 38 OR SN 38 11

L391(24507)SEA FILE=EMBASE ABB=ON PLU=ON VINBLASTINE OR CELLBLASTIN OR
VINBLASTINE SULFATE OR VELBAN OR VELBE OR VINBLASTIN HEXAL OR
VINBLASTINA LILLY

L392(84300)SEA FILE=EMBASE ABB=ON PLU=ON METHOTREXATE OR AMETHOPTERIN
OR (METHOTREXATE (2A) (HYDRATE OR (DICESIUM OR DISODIUM OR
SODIUM) (A) SALT)) OR MEXATE

L393(76081)SEA FILE=EMBASE ABB=ON PLU=ON CISPLATIN OR BIOCISPLATINUM OR
CIS PLATINUM DICHLORODIAMMINEPLATINUM OR NSC-119875 OR
PLATIDIAM OR PLATINO OR PLATINOL OR PLATINUM DIAMMINODICHLORIDE

L394(1139)SEA FILE=EMBASE ABB=ON PLU=ON VALSPODAR OR PSC 833 OR PSC833

L395(113382)SEA FILE=EMBASE ABB=ON PLU=ON CYCLOPHOSPHAMIDE OR CYCLOPHOSP
AMIDE MONOHYDRATE OR CYCLOPHOSPHANE OR CYTOPHOSPHAN OR CYTOXAN
OR ENDOXAN OR NEOSAR OR NSC-26271 OR PROCYTOX OR SENDOXAN

L396(12592)SEA FILE=EMBASE ABB=ON PLU=ON MITOXANTRONE OR MITOXANTRONE
(2A)(HYDROCHLORIDE OR ACETATE) OR MITOZANTRONE ORMITROXONE OR
NOVANTRON OR NOVANTRONE OR NSC 279836 OR NSC 287836 OR NSC
299195 NSC 301739 OR NSC 301739D

L397(5090)SEA FILE=EMBASE ABB=ON PLU=ON TOPOTECAN OR HYCANTAMINE OR
HYCANTIN OR NOGITECAN HYDROCHLORIDE OR NSC-609699 OR TOPOTECAN
HYDROCHLORIDE

L398(400)SEA FILE=EMBASE ABB=ON PLU=ON BISANTRENE OR BISANTRENE
DIHYDROCHLORIDE OR CL 216942 OR CL216 942 OR NSC 337766

L399(300548)SEA FILE=EMBASE ABB=ON PLU=ON (L384 OR L387 OR L388 OR L389
OR L390 OR L391 OR L392 OR L393 OR L394 OR L395 OR L396 OR
L397 OR L398)

L400(100)SEA FILE=EMBASE ABB=ON PLU=ON L378 AND L399

L401(139123)SEA FILE=EMBASE ABB=ON PLU=ON DRUG RESISTANCE+NT/CT

L402(17)SEA FILE=EMBASE ABB=ON PLU=ON L400 AND L401

L403(12)SEA FILE=EMBASE ABB=ON PLU=ON L402 AND PY<=2004

L404(3)SEA FILE=EMBASE ABB=ON PLU=ON L403 AND (L375 OR L376)

L405 6 SEA FILE=EMBASE ABB=ON PLU=ON L383 OR L404

L406 6 SEA FILE=EMBASE ABB=ON PLU=ON L350 OR L405

=> FILE WPIX

FILE 'WPIX' ENTERED AT 12:01:58 ON 18 NOV 2008

COPYRIGHT (C) 2008 THOMSON REUTERS

Serial Number: 10/580,507

FILE LAST UPDATED: 12 NOV 2008 <20081112/UP>
MOST RECENT UPDATE: 200873 <200873/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE
>>> Now containing more than 1.2 million chemical structures in DCR <<<

>>> IPC Reform backfile reclassifications have been loaded to end of September 2008. No update date (UP) has been created for the reclassified documents, but they can be identified by 20060101/UPIC, and 20061231/UPIC, 20070601/UPIC, 20071001/UPIC, 20071130/UPIC, 20080401/UPIC, 20080701/UPIC and 20081001/UPIC.
ECLA reclassifications to mid August and US national classification mid September 2008 have also been loaded. Update dates 20080401, 20080701 and 20081001/UPEC and /UPNC have been assigned to these. <<

FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE,
PLEASE VISIT:
http://www.stn-international.de/training_center/patents/stn_guide.pdf

FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE
<http://scientific.thomsonreuters.com/support/patents/coverage/latestupdates/>

EXPLORE DERWENT WORLD PATENTS INDEX IN STN ANAVIST, VERSION 2.0:
http://www.stn-international.com/archive/presentations/DWPIAnaVist2_0608.pdf

>>> HELP for European Patent Classifications see HELP ECLA, HELP ICO <<<

=> D QUE L449

L407(3269)SEA FILE=WPIX ABB=ON PLU=ON PACLITAXEL
L408(3244)SEA FILE=WPIX ABB=ON PLU=ON DOXORUBICIN
L409(10953)SEA FILE=WPIX ABB=ON PLU=ON L407 OR L408 OR EPIRUBICIN OR
5-FLUOROURACIL OR IRINOTECAN OR VINBLASTINE OR VINBLASTIN OR
METHOTREXATE OR CISPLATIN OR CISPLATINE OR VALSPODAR OR
CYCLOPHOSPHAMIDE OR MITOXANTRONE OR TOPOTECAN OR BISANTRENE
L410(2141)SEA FILE=WPIX ABB=ON PLU=ON DRUG RESISTANCE
L411(1636)SEA FILE=WPIX ABB=ON PLU=ON DRUG RESISTANT
L412(3233)SEA FILE=WPIX ABB=ON PLU=ON L410 OR L411
L413(97)SEA FILE=WPIX ABB=ON PLU=ON (ISOGENIC OR ISOGENEIC) (5A)
CELL
L414(4)SEA FILE=WPIX ABB=ON PLU=ON (ISOGENIC OR ISOGENEIC) (2A)
TRANSPLANTATION
L415(3590)SEA FILE=WPIX ABB=ON PLU=ON ADENOCARCINOMA
L416(4)SEA FILE=WPIX ABB=ON PLU=ON L412 AND L413
L417(1)SEA FILE=WPIX ABB=ON PLU=ON L416 AND DETERMINING/TI
L418(6)SEA FILE=WPIX ABB=ON PLU=ON L409 AND L413
L419(5)SEA FILE=WPIX ABB=ON PLU=ON L418 NOT L416
L420(1)SEA FILE=WPIX ABB=ON PLU=ON L419 AND ANEUPLOID/TI
L421(4)SEA FILE=WPIX ABB=ON PLU=ON L413 AND L415
L422(1)SEA FILE=WPIX ABB=ON PLU=ON L414 AND DIPLOID/TI
L423 7 SEA FILE=WPIX ABB=ON PLU=ON L417 OR L420 OR L421 OR L422
L424(4940)SEA FILE=WPIX ABB=ON PLU=ON PACLITAXEL OR 7 EPI TAXOL OR
ANZATAX OR BRIS TAXOL OR NSC-125973 OR PAXENE OR PRAXEL OR
TAXOL OR TAXOL A
L425(4289)SEA FILE=WPIX ABB=ON PLU=ON DOXORUBICIN OR ADRIABLASTIN OR
ADRIABLASTINE OR ADRIAMYCIN OR ADRIBLASTIN OR ADRIBLASTINA OR
ADRIBLASTINE OR ADRIMEDAC OR CAELYX OR DOX SL OR DOXIL OR DOXO
CELL
L426(181)SEA FILE=WPIX ABB=ON PLU=ON DOXOLEM OR (DOXORUBICIN (2A)

Serial Number: 10/580,507

(HEXAL OR NC OR HYDROCHLORIDE)) OR (DOXORUBICINA (2A) (FERRER FARM OR FUNK OR TEDEC)) OR DOXOTEC OR FARMIBLASTINA OR MYOCET OR ONKODOX OR RIBODOXO OR RIBOSEPHARM OR RUBEX

L427(4290)SEA FILE=WPIX ABB=ON PLU=ON L425 OR L426

L428(772)SEA FILE=WPIX ABB=ON PLU=ON EPIRUBICIN OR (EPI (2A) (ADRIAMYCIN OR DOXORUBICIN OR DXR)) OR EPIADRIAMYCIN OR EPIDOXORUBICIN OR ELLENCE OR EPILEM OR EPIRUBICIN HYDROCHLORIDE OR FARMORUBICIN OR FARMORUBICINA OR FARMORUBICINE OR NSC-256942 OR PHARMORUBICIN

L429(3135)SEA FILE=WPIX ABB=ON PLU=ON FLUOROURACIL OR FLUOROURACIL-BIOSYN OR FLUORURACIL OR ADRUCIL OR CARAC OR EFUDIX OR EFUDIX OR FLUOROPLEX OR (FLUOROURACIL (2A) (MONONITRATE OR (MONOPOTASSIUM OR MONOSODIUM OR POTASSIUM) (A) SALT))

L430(986)SEA FILE=WPIX ABB=ON PLU=ON IRINOTECAN OR CAMPTOSAR OR CAMPTOTHECIN 11 OR IRINOTECAN HYDROCHLORIDE OR IRRINOTECAN OR SN 38 OR SN 38 11

L431(1638)SEA FILE=WPIX ABB=ON PLU=ON VINBLASTINE OR CELLBLASTIN OR VINBLASTINE SULFATE OR VELBAN OR VELBE OR VINBLASTIN HEXAL OR VINBLASTINA LILLY

L432(3246)SEA FILE=WPIX ABB=ON PLU=ON METHOTREXATE OR AMETHOPTERIN OR (METHOTREXATE (2A) (HYDRATE OR (DICESIUM OR DISODIUM OR SODIUM) (A) SALT)) OR MEXATE

L433(2910)SEA FILE=WPIX ABB=ON PLU=ON CISPLATIN OR BIOCISPLATINUM OR CIS PLATINUM DICHLORODIAMMINEPLATINUM OR NSC 119875 OR PLATIDIAM OR PLATINO OR PLATINOL OR PLATINUM DIAMMINODICHLORIDE

L434(56)SEA FILE=WPIX ABB=ON PLU=ON VALSPODAR OR PSC 833 OR PSC833

L435(2367)SEA FILE=WPIX ABB=ON PLU=ON CYCLOPHOSPHAMIDE OR CYCLOPHOSPHAMIDE MONOHYDRATE OR CYCLOPHOSPHANE OR CYTOPHOSPHAN OR CYTOXAN OR ENDOXAN OR NEOSAR OR NSC-26271 OR PROCYTOX OR SENDOXAN

L436(903)SEA FILE=WPIX ABB=ON PLU=ON MITOXANTRONE OR MITOXANTRONE (2A) (HYDROCHLORIDE OR ACETATE) OR MITOZANTRONE OR MITROXONE OR NOVANTRON OR NOVANTRONE OR NSC 279836 OR NSC 287836 OR NSC 299195 NSC 301739 OR NSC 301739D

L437(848)SEA FILE=WPIX ABB=ON PLU=ON TOPOTECAN OR HYCAMTAMINE OR HYCAMTIN OR NOGITECAN HYDROCHLORIDE OR NSC-609699 OR TOPOTECAN HYDROCHLORIDE

L438(34)SEA FILE=WPIX ABB=ON PLU=ON BISANTRENE OR BISANTRENE DIHYDROCHLORIDE OR CL 216942 OR CL216 942 OR NSC 337766

L439(12813)SEA FILE=WPIX ABB=ON PLU=ON (L424 OR L427 OR L428 OR L429 OR L430 OR L431 OR L432 OR L433 OR L434 OR L435 OR L436 OR L437 OR L438)

L440(107)SEA FILE=WPIX ABB=ON PLU=ON (ISOGENIC OR ISOGENEIC) (7A) CELL

L441(7)SEA FILE=WPIX ABB=ON PLU=ON L439 AND L440

L442(16709)SEA FILE=WPIX ABB=ON PLU=ON (BREAST OR MAMMARY) (2A) (NEOPLASM OR CANCER OR TUMOR OR CYSTS)

L443(5584)SEA FILE=WPIX ABB=ON PLU=ON (UTERINE OR ENDOMETRIAL OR CERVICAL) (2A) (NEOPLASM OR CANCER OR TUMOR OR CYSTS)

L444(6)SEA FILE=WPIX ABB=ON PLU=ON L440 AND (L442 OR L443)

L445(5)SEA FILE=WPIX ABB=ON PLU=ON L444 NOT L441

L446(4)SEA FILE=WPIX ABB=ON PLU=ON L445 NOT FLUORESCENT/TI

L447(2)SEA FILE=WPIX ABB=ON PLU=ON L444 NOT L446

L448 6 SEA FILE=WPIX ABB=ON PLU=ON L446 OR L447

L449 10 SEA FILE=WPIX ABB=ON PLU=ON L423 OR L448

=> DUP REMOVE L450 L139 L326 L406 L449

FILE 'HCAPLUS' ENTERED AT 12:02:47 ON 18 NOV 2008

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

Serial Number: 10/580,507

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'MEDLINE' ENTERED AT 12:02:47 ON 18 NOV 2008

FILE 'BIOSIS' ENTERED AT 12:02:47 ON 18 NOV 2008

Copyright (c) 2008 The Thomson Corporation

FILE 'EMBASE' ENTERED AT 12:02:47 ON 18 NOV 2008

Copyright (c) 2008 Elsevier B.V. All rights reserved.

FILE 'WPIX' ENTERED AT 12:02:47 ON 18 NOV 2008

COPYRIGHT (C) 2008 THOMSON REUTERS

PROCESSING COMPLETED FOR L450

PROCESSING COMPLETED FOR L139

PROCESSING COMPLETED FOR L326

PROCESSING COMPLETED FOR L406

PROCESSING COMPLETED FOR L449

L615 52 DUP REMOVE L450 L139 L326 L406 L449 (9 DUPLICATES REMOVED)

L615 ANSWER 1 OF 52 HCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 4

ACCESSION NUMBER: 2005:493705 HCAPLUS Full-text

DOCUMENT NUMBER: 143:1262

TITLE: Use of isogenic drug-resistant cell
lines to determine the sequence of
chemotherapeutic drug treatment

INVENTOR(S): Parissenti, Amadeo; Guo, Baoqing; Villeneuve, David
J.; Hembruff, Stacey L.

PATENT ASSIGNEE(S): Can.

SOURCE: PCT Int. Appl., 55 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
WO 2005052184	A1	20050609	WO 2004-CA2039	20041126 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2546622	A1	20050609	CA 2004-2546622	20041126 <--
GB 2423526	A	20060830	GB 2006-12186	20041126 <--
US 20070254330	A1	20071101	US 2006-580507	20060523 <--
PRIORITY APPLN. INFO.:			US 2003-525479P	P 20031126 <--
			WO 2004-CA2039	W 20041126 <--

ED Entered STN: 10 Jun 2005

AB The invention provides isogenic cell lines and uses said isogenic cell lines
in a method for determining a sequence to administer multiple types of
chemotherapeutic drugs for killing cancerous cells to reduce the induction of
drug cross-resistance in a patient. Method also involves screening drug

Serial Number: 10/580,507

candidates to select a lead anticancer drug from many of candidate drugs, the lead having a reduced capacity to induce cross resistance in a patient against one or more known anticancer drugs, and all of the drugs having the ability to kill cancerous cells of the same selected tumor type. Moreover, the methods involve determining a sequence to administer multiple types of cytotoxic drugs for killing undesired cells to reduce the indication of drug cross-resistance in the cells.

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L615 ANSWER 2 OF 52 HCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 5

ACCESSION NUMBER: 2004:241378 HCAPLUS Full-text

DOCUMENT NUMBER: 141:288644

TITLE: Cross-Resistance Studies of Isogenic Drug-Resistant Breast Tumor Cell Lines Support Recent Clinical Evidence Suggesting that Sensitivity to Paclitaxel may be Strongly Compromised by Prior Doxorubicin Exposure

AUTHOR(S): Guo, Baoqing; Villeneuve, David J.; Hembruff, Stacey L.; Kirwan, Angie F.; Blais, David E.; Bonin, Michel; Parissenti, Amadeo M.

CORPORATE SOURCE: Tumor Biology Research Program, Northeastern Ontario Regional Cancer Centre, Sudbury, ON, Can.

SOURCE: Breast Cancer Research and Treatment (2004), 85(1), 31-51

CODEN: BCTRD6; ISSN: 0167-6806

PUBLISHER: Kluwer Academic Publishers

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 24 Mar 2004

AB Less than half of breast cancer patients respond to second-line chemotherapy with paclitaxel after failing treatment with anthracyclines such as doxorubicin. A recent clin. trial by Paridaens et al. [J. Clin. Oncol. 18: 724-733, 2000] examined whether patients may derive a better clin. benefit if paclitaxel was administered before doxorubicin. While overall survival was similar regardless of the order of drug administration, a >4-fold reduction in the response rate to paclitaxel was observed after late crossover from doxorubicin, compared to the response rate to doxorubicin after late crossover from paclitaxel. This may be related to differences in the ability of the drugs to induce cross-resistance to each other. To test this hypothesis, we examined whether isogenic breast tumor cells selected for resistance to doxorubicin exhibit greater cross-resistance to paclitaxel and other drugs than identical cells selected for resistance to paclitaxel. We found that cells selected for resistance to paclitaxel showed strong resistance (≥ 40 -fold) to paclitaxel and docetaxel, with little cross-resistance (4-fold) to doxorubicin. In contrast, cells selected for resistance to doxorubicin exhibited 50-fold resistance to doxorubicin and a dramatic 4700-fold and 14,600-fold cross-resistance to paclitaxel and docetaxel, resp. Doxorubicin-resistant cells exhibited higher P-glycoprotein and breast cancer resistance protein (BCRP) levels than paclitaxel-resistant cells. In addition, procaspase-9 was strongly downregulated in doxorubicin-resistant cells but not in paclitaxel-resistant cells. These differences may account for the contrasting cross-resistance profiles observed for the two cell lines and may help to explain why treatment of breast cancer patients with paclitaxel appears to be compromised by prior doxorubicin exposure.

REFERENCE COUNT: 77 THERE ARE 77 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L615 ANSWER 3 OF 52 HCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 6

ACCESSION NUMBER: 2002:942216 HCAPLUS Full-text

Serial Number: 10/580,507

DOCUMENT NUMBER: 138:378753
TITLE: Effect of stathmin on the sensitivity to
antimicrotubule drugs in human breast cancer
AUTHOR(S): Alli, Elizabeth; Bash-Babula, Judy; Yang, Jin-Ming;
Hait, William N.
CORPORATE SOURCE: The Cancer Institute of New Jersey, Departments of
Medicine and Pharmacology, University of Medicine and
Dentistry of New Jersey-Robert Wood Johnson Medical
School, New Brunswick, NJ, 08901, USA
SOURCE: Cancer Research (2002), 62(23), 6864-6869
CODEN: CNREA8; ISSN: 0008-5472
PUBLISHER: American Association for Cancer Research
DOCUMENT TYPE: Journal
LANGUAGE: English

ED Entered STN: 12 Dec 2002

AB Stathmin is a p53-regulated protein known to influence microtubule dynamics. Because several chemotherapeutic agents used to treat breast cancer alter the dynamic equilibrium of tubulin polymerization, stathmin may play an important role in determining the sensitivity to these drugs. Therefore, we evaluated the effect of stathmin expression on the action of taxanes and Vinca alkaloids using a panel of human breast cancer cell lines. Cell lines harboring mutant p53 expressed high levels of stathmin. Two cell lines with different levels of endogenous stathmin expression and isogenic-paired cell lines transfected to overexpress stathmin were used to determine whether or not stathmin modulated the sensitivity to drugs. Overexpression of stathmin decreased polymerization of microtubules, markedly decreased binding of paclitaxel, and increased binding of vinblastine. Stathmin overexpression decreased sensitivity to paclitaxel and, to a lesser extent, to vinblastine. In contrast, stathmin content had no significant effect on the sensitivity to chemotherapeutic drugs that do not target microtubules. Cell lines overexpressing stathmin were more likely to enter G2 but less likely to enter mitosis as determined by fluorescence-activated cell sorting and mitotic index. This effect was magnified when stathmin-overexpressing cells were treated with vinblastine as measured by the detection of proteins phosphorylated in early mitosis. These data suggest that the action of antimicrotubule drugs can be affected by stathmin in at least two ways: (a) altered drug binding; and (b) growth arrest at the G2 to M boundary. Mutant p53 breast cancers exhibiting high levels of stathmin may be resistant to antimicrotubule agents.

REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L615 ANSWER 4 OF 52 HCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 8

ACCESSION NUMBER: 1996:194227 HCAPLUS Full-text
DOCUMENT NUMBER: 124:278297
ORIGINAL REFERENCE NO.: 124:51178h,51179a
TITLE: Protective effect of O6-methylguanine-DNA
methyltransferase (MGMT) on the cytotoxic and
recombinogenic activity of different antineoplastic
drugs
AUTHOR(S): Preuss, Ilka; Thust, Rudolf; Kaina, Bernd
CORPORATE SOURCE: Institute Toxicology, University Mainz, Mainz,
D-55131, Germany
SOURCE: International Journal of Cancer (1996),
65(4), 506-12
CODEN: IJCNAW; ISSN: 0020-7136
PUBLISHER: Wiley-Liss
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 04 Apr 1996

Serial Number: 10/580,507

AB The DNA repair protein O6-methylguanine-DNA methyltransferase (MGMT) removes alkyl groups from the O6 position of guanine in DNA and thus may protect cells against genotoxic effects of agents inducing this lesion. To analyze quant. the level of protection mediated by MGMT against antineoplastic drugs, we determined the cytotoxic and recombinogenic (sister-chromatid exchange inducing) effects of various chemotherapeutic agents in a pair of isogenic Chinese hamster cell lines deficient and proficient for MGMT, generated upon transfection with human MGMT cDNA. Furthermore, we compared the responses of the human cell lines HeLa MR (MGMT deficient) and HeLa S3 (MGMT proficient) to the various agents. It is shown that: (1) MGMT proficient cells are resistant in cell killing to the methylating drug streptozotocin and all the chloroethylating nitrosoureas tested. There was a marked agent specificity in protection. The level of resistance provoked by MGMT increased in the order BCNU < CCNU < ACNU < HeCNU < streptozotocin. (2) MGMT did not protect cells against killing induced by chlorambucil, cisplatin, melphalan, activated cyclophosphamide (mafosfamide) and activated ifosfamide (4-hydroperoxy-ifosfamide). (3) MGMT caused protection against the recombinogenic effect of all nitrosoureas tested. The lowest level of protection was again observed for BCNU, followed by CCNU, ACNU < HeCNU < streptozotocin. (4) MGMT proficient cells did not exhibit resistance in SCE induction towards cyclophosphamide (activated by microsomes), 4-hydroperoxy-ifosfamide, mafosfamide, chlorambucil and melphalan. Some protection was afforded, however, against cisplatin (and transplatin). This effect was abolished by pretreatment of cells with O6-benzylguanine, which depletes MGMT, indicating that some lesion(s) induced by cisplatin giving rise to SCEs can be repaired by MGMT. Taken together, these results indicate that streptozotocin, HeCNU and ACNU are more selective than CCNU and BCNU in killing MGMT deficient cells, and that in the cases of cyclophosphamide, ifosfamide, chlorambucil, cisplatin and melphalan MGMT is not involved in mediating cytotoxic drug resistance.

L615 ANSWER 5 OF 52 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:79267 HCAPLUS Full-text

DOCUMENT NUMBER: 144:164226

TITLE: ABC transporter-based methods for the identification and use of compounds suitable for the treatment of drug-resistant cancer cells

INVENTOR(S): Szakacs, Gergely; Annereau, Jean-Phillipe; Lababidi, Samir; Gottesman, Michael M.; Weinstein, John

PATENT ASSIGNEE(S): United States Dept. of Health and Human Services, NIH, USA

SOURCE: PCT Int. Appl., 99 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
WO 2006009765	A2	20060126	WO 2005-US21253	20050616 <--
WO 2006009765	A3	20060511		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,			

Serial Number: 10/580,507

IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF,
CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM,
KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG,
KZ, MD, RU, TJ, TM

AU 2005265027 A1 20060126 AU 2005-265027 20050616 <--
CA 2570501 A1 20060126 CA 2005-2570501 20050616 <--
EP 1766407 A2 20070328 EP 2005-766603 20050616 <--

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR

US 20080214606 A1 20080904 US 2006-629233 20061207 <--
PRIORITY APPLN. INFO.: US 2004-580397P P 20040618 <--
US 2004-602640P P 20040819 <--
WO 2005-US21253 W 20050616

OTHER SOURCE(S): MARPAT 144:164226

ED Entered STN: 27 Jan 2006

AB The invention relates to ABC transporter-based methods for the identification
of compds. useful for the treatment of drug resistance, and to treatment
methods using the identified compds.

L615 ANSWER 6 OF 52 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:31378 HCAPLUS Full-text

DOCUMENT NUMBER: 144:121769

TITLE: Method of enhancing the effect of anticancer drug by
inhibition of the activity of AMP-activated protein
kinase (AMPK)

INVENTOR(S): Ha, Joohun; Park, Myunggyu

PATENT ASSIGNEE(S): MD Bioalpha Co., Ltd., S. Korea

SOURCE: PCT Int. Appl., 26 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
WO 2006004360	A1	20060112	WO 2005-KR2103	20050702 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
KR 2006066610	A	20060616	KR 2005-59494	20050702 <--
EP 1765393	A1	20070328	EP 2005-765959	20050702 <--
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
PRIORITY APPLN. INFO.:			KR 2004-51469 A 20040702 <--	
			WO 2005-KR2103 W 20050702	

ED Entered STN: 13 Jan 2006

AB The invention provides a method for enhancing therapeutic effects of an
anticancer drug by inhibition of AMPK activity in conjunction with use of an
anticancer drug for inhibiting proliferation and/or metastasis of cancer. The

Serial Number: 10/580,507

method can significantly enhance therapeutic effects of an anticancer drug via inhibition of AMPK activity and therefore is very useful in inhibition of cancer proliferation and metastasis, utilizing anticancer drugs. Further, the invention enables use of conventional anticancer drugs for cancer cells having drug resistance to such anticancer drugs.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L615 ANSWER 7 OF 52 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:676313 HCAPLUS Full-text
DOCUMENT NUMBER: 145:137818
TITLE: Tubulin isotype screening in cancer therapy
using halichondrin B analogs
INVENTOR(S): Agoul'nik, Sergei; Kuznetsov, Galina; Littlefield, Bruce A.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 43 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20060154312	A1	20060713	US 2005-299260	20051207 <--
WO 2006076100	A2	20060720	WO 2005-US44421	20051207 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
EP 1831697	A2	20070912	EP 2005-857058	20051207 <--
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
JP 2008522623	T	20080703	JP 2007-545622	20051207 <--
PRIORITY APPLN. INFO.:			US 2004-634734P	P 20041209 <--
			WO 2005-US44421	W 20051207

OTHER SOURCE(S): MARPAT 145:137818

ED Entered STN: 13 Jul 2006

AB Chemotherapeutic agents that interfere with microtubule assembly or disassembly in the cell are potent inhibitors of cell replication. Examples of such agents include halichondrin B analogs. It has been shown that the susceptibility of certain cancers to analogs of halichondrin B correlates with the expression of particular tubulin isotypes or other microtubule-associated proteins such as MAP-4 and stathmin. Correlations such as these may be used in identifying patients suitable for treatment using a particular chemotherapeutic agent. Such a system avoids treating patients with cytotoxic compds. where there is a minimal or no effect on the cancer. The invention also provides a system of establishing these correlations for different compds. and cancer types. The system will be particularly useful in establishing correlations between anti-microtubule agents and cancers such as

Serial Number: 10/580,507

lung, breast, and ovarian cancer. Kits and reagents useful in practicing the invention are also provided.

L615 ANSWER 8 OF 52 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:705996 HCAPLUS Full-text
DOCUMENT NUMBER: 144:362628
TITLE: Comparative proteomics studies of soluble
nuclear proteins of drug susceptible and
resistant human breast cancer MCF-7
cells
AUTHOR(S): Fu, Zongming
CORPORATE SOURCE: Univ. of Maryland, College Park, MD, USA
SOURCE: (2004) 118 pp. Avail.: UMI, Order No.
DA3152309
From: Diss. Abstr. Int., B 2005, 65(11), 5560
DOCUMENT TYPE: Dissertation
LANGUAGE: English
ED Entered STN: 09 Aug 2005
AB Unavailable

L615 ANSWER 9 OF 52 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:1337995 HCAPLUS Full-text
DOCUMENT NUMBER: 144:189436
TITLE: Brcal-deficient murine mammary epithelial
cells have increased sensitivity to CDDP and MMS
AUTHOR(S): Sgagias, Magdalene K.; Wagner, Kay-Uwe; Hamik, Brad;
Stoeger, Scott; Spieker, Rebecca; Huber, L. Julie;
Chodosh, Lewis A.; Cowan, Kenneth H.
CORPORATE SOURCE: Eppley Institute for Research in Cancer and Allied
Diseases, University of Nebraska Medical Center,
Omaha, NE, USA
SOURCE: Cell Cycle (2004), 3(11), 1451-1456
CODEN: CCEYAS; ISSN: 1538-4101
PUBLISHER: Landes Bioscience
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 25 Dec 2005
AB In this report we describe the isolation of an isogenic pair of Brcal++ and
Brcal-/- murine mammary epithelial cells (MMECs). These cells were isolated
from Brcal conditional knock-out mice which contained loxP sites flanking exon
11 of the Brcal gene (Brcalfl/fl) and then immortalized by infection with HPV-
16E6 retrovirus to degrade p53 protein. Brcal-/- MMECs were generated by
deletion of exon 11 following transduction of Brcalfl/fl MMECs with a
retroviral vector expressing Cre recombinase. Brcal-deficiency rendered MMECs
sensitive to cis-platinum (II) diamine dichloride (CDDP) and methylmethane
sulfonate (MMS). The Brcal+/+ and Brcal-/- MMECs is the only known pair of
isogenic mammary epithelial cell lines. The understanding of the mechanisms
of the CDDP sensitivity of the BRCA1-deficient mammary epithelial cells would
be very important in understanding how BRCA1-deficiency plays a role in tissue
specific breast cancer chemotherapy. These studies support the role of BRCA1
in the CDDP-induced and MMS-induced DNA damage and repair by p53-independent
pathways.
REFERENCE COUNT: 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L615 ANSWER 10 OF 52 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:483476 HCAPLUS Full-text
DOCUMENT NUMBER: 141:205591

Serial Number: 10/580,507

TITLE: Three-dimensional culture and multidrug resistance: effects on immune reactivity of MCF-7 cells by monocytes

AUTHOR(S): Mougel, Laurent; Tarpin, Michel; Albert, Philippe; Le Naour, Richard; Devy, Jerome; Kaplan, Herve; Venteo, Lydie; Carlier, Annie; Madoulet, Claudie

CORPORATE SOURCE: Laboratoire de Biochimie et Biologie Moleculaire EA-3306, UFR de Pharmacie, Reims, 51096, Fr.

SOURCE: Anticancer Research (2004), 24(2B), 935-941
CODEN: ANTRD4; ISSN: 0250-7005

PUBLISHER: International Institute of Anticancer Research

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 16 Jun 2004

AB Multicellular spheroids are known to be the most adapted model to keep the in vitro resistance properties of cells. This in vivo-like tissue-culture representation was applied to investigate the immune reactivity of MCF-7 cells by monocytes. Human blood monocytes, obtained by elutriation, were co-cultured with multicellular tumor spheroids of drug-sensitive (MCF-7S) and doxorubicin-resistant (MCF-7DXR) MCF-7 breast cancer cells. Tumor cells, according to their phenotype, induced differential recruitment and behavior of the immune cells towards the two types of spheroids. The secretion of various cytokines and the expression of several adhesion mols. were analyzed. The MCF-7DXR/monocytes co-culture supernatant showed higher levels of IL-6 and IL-8 than the MCF-7S/monocytes co-culture supernatant. Cells from the MCF-7DXR spheroids expressed some adhesion mols., CD44 and CD54, leading to a strong cellular cohesion in comparison with the sensitive spheroids. The two spheroid phenotypes represented an excellent model system for determining the precise tumor microenvironment in which cells move, the crucial mol. requirements and the mechanisms by which immunotherapeutic strategies could be developed to eradicate chemo-resistant tumors.

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L615 ANSWER 11 OF 52 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:833884 HCAPLUS Full-text

DOCUMENT NUMBER: 139:317425

TITLE: Smac-peptides as therapeutics against cancer and autoimmune diseases by sensitizing for TRAIL- or anticancer drug-induced apoptosis

INVENTOR(S): Debatin, Klaus Michael; Fulda, Simone

PATENT ASSIGNEE(S): Deutsches Krebsforschungszentrum Stiftung des Oeffentlichen Rechts, Germany

SOURCE: Eur. Pat. Appl., 19 pp.
CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1354952	A1	20031022	EP 2002-8199	20020417 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
EP 1354953	A1	20031022	EP 2002-15499	20020712 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
WO 2003086470	A2	20031023	WO 2003-EP4039	20030417 <--
WO 2003086470	A3	20040506		

Serial Number: 10/580,507

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,
TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2003236211 A1 20031027 AU 2003-236211 20030417 <--

EP 1495124 A2 20050112 EP 2003-722503 20030417 <--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

JP 2005536457 T 20051202 JP 2003-583486 20030417 <--

US 20050222387 A1 20051006 US 2005-511037 20050119 <--

PRIORITY APPLN. INFO.:

EP 2002-8199 A 20020417 <--

EP 2002-15499 A 20020712 <--

WO 2003-EP4039 W 20030417 <--

ED Entered STN: 24 Oct 2003

AB The invention is directed to the use of Smac to sensitize different tumors and self-reactive immune cells to various pro-apoptotic stimuli, in that the cells subsequently undergo apoptosis. Therefore, Smac can be used as a compound for the manufacture of a medicament for the treatment of cancer and autoimmune diseases. Sensitization of the cells is achieved either by applying a cell-permeable form of Smac combined with known anticancer agents or by overexpression of the protein. It is an object of the invention to provide a new method in cancer and autoimmune disease therapy by using Smac agonists for apoptosis regulation. Thus, Smac agonists represent novel promising cancer and autoimmune disease therapeutics to potentiate the efficacy of cytotoxic therapies even in resistant tumors and immune cells. In particular, overexpression of full-length Smac protein potentiated TRAIL-induced apoptosis and also markedly increased apoptosis induced by anti-CD95 antibody or cytotoxic drugs in transfected SHEP neuroblastoma cells. The overexpression of Smac is shown to promote apoptosis through antagonizing the inhibition of XIAP of both distal and proximal events in the caspase cascade. The cytosolic Smac, with the deletion of transit peptide for mitochondria (N-terminal 55 AA), bypasses Bcl-2 inhibition in several cell types in response to different pro-apoptotic stimuli. The cell permeable Smac peptide (4 N-terminal IAP-interacting plus 3 addition following residues linked to TAT transduction domain) can facilitate intracellular delivery of Smac peptide and sensitize several resistant cell lines with defects in apoptosis signaling for treatment with TRAIL or doxorubicin. Expression of a cytosolic active form of Smac or cell-permeable Smac peptides bypassed the Bcl-2 block, which prevented the release of Smac from mitochondria, and also sensitized resistant neuroblastoma or melanoma cells and patient-derived primary neuroblastoma cells ex vivo. Thus, Smac agonists represent novel promising cancer therapeutics to potentiate the efficacy of cytotoxic therapies. Smac peptides is shown to enhance the antitumor effect of TRAIL in glioblastoma in mouse glioblastoma model and induce eradication of tumors.

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L615 ANSWER 12 OF 52 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:857339 HCAPLUS Full-text

DOCUMENT NUMBER: 139:78553

TITLE: Multidrug-Resistant MCF-7 Cells:
An Identity Crisis? Response

AUTHOR(S): Pirnia, Farzaneh; Borner, Markus M.

CORPORATE SOURCE: Institute of Medical Oncology, Bern, Switz.

Serial Number: 10/580,507

SOURCE: Journal of the National Cancer Institute (2002
, 94(21), 1654
CODEN: JNCIEQ; ISSN: 0027-8874
PUBLISHER: Oxford University Press
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 12 Nov 2002
AB A polemic in response to K. Mehta et al. (ibid 1652-4).

L615 ANSWER 13 OF 52 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:857338 HCAPLUS Full-text

DOCUMENT NUMBER: 139:78552

TITLE: Multidrug-Resistant MCF-7 Cells:
An Identity Crisis?

AUTHOR(S): Mehta, Kapil; Devarajan, Eswaran; Chen, Jack; Multani,
Asha; Pathak, Sen

CORPORATE SOURCE: Department of Bioimmunotherapy, Div. of Cancer Med.,
The University of Texas M. D. Anderson Cancer Center,
Houston, TX, 77030, USA

SOURCE: Journal of the National Cancer Institute (2002
, 94(21), 1652-1654

CODEN: JNCIEQ; ISSN: 0027-8874

PUBLISHER: Oxford University Press

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 12 Nov 2002

AB A polemic in response to D. A. Scudiero et al. (ibid 1998, 90, 862) and F.
Pirnia et al. (ibid 2000, 92, 1535-6). Starting with the parental MCF-7 cell
line, the authors obtained doxorubicin-resistant sublines by culturing in the
presence of doxorubicin. The presence of full-length caspase-3 transcript was
detected in resistant sublines. In view of these results, the authors suggest
that the original nomenclature of MCF-7/ADR for MCF-7-derived drug-resistant
sublines be retained to reveal the fact that various clones in a given tumor
population can be extremely diverse in terms of their genotype and phenotype
characteristics.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L615 ANSWER 14 OF 52 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:834395 HCAPLUS Full-text

DOCUMENT NUMBER: 136:144800

TITLE: The differential sensitivity of Bcl-
2-overexpressing human breast tumor cells to
TRAIL or doxorubicin-induced apoptosis is dependent on
Bcl-2 protein levels

AUTHOR(S): Ruiz de Almodovar, Carmen; Ruiz-Ruiz, Carmen;
Munoz-Pinedo, Cristina; Robledo, Gema; Lopez-Rivas,
Abelardo

CORPORATE SOURCE: Instituto de Parasitologia y Biomedicina CSIC,
Granada, 18001, Spain

SOURCE: Oncogene (2001), 20(48), 7128-7133

CODEN: ONCNES; ISSN: 0950-9232

PUBLISHER: Nature Publishing Group

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 18 Nov 2001

AB Bcl-2 protein is a potent anti-apoptotic protein that inhibits a mitochondria-
operated pathway of apoptosis in many cells. DNA damaging agents and death
receptor ligands can activate this mitochondrial apoptotic mechanism. Tumor

Serial Number: 10/580,507

necrosis factor-related apoptosis-inducing ligand (TRAIL) has been suggested to escape from the inhibitory action of Bcl-2 protein. We show that in human breast tumor MCF-7 cells, TRAIL induced a mitochondrial pathway of apoptosis that involved cytochrome c release from mitochondria and activation of caspase 9. The DNA damaging drug doxorubicin also activated this mitochondria-regulated mechanism of apoptosis, which was inhibited in Bcl-2-overexpressing cells. We also demonstrate that in MCF-7 cells Bcl-2 might confer resistance to TRAIL-induced apoptosis, depending on the expression levels of the anti-apoptotic protein. These results indicate that enhanced expression of Bcl-2 in tumor cells can render these cells less sensitive not only to chemotherapeutic drugs but also to TRAIL.

REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L615 ANSWER 15 OF 52 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:438440 HCAPLUS Full-text

DOCUMENT NUMBER: 135:208986

TITLE: Roles of the Ras-Raf-MEK-ERK signaling pathway in the development of resistance to the chemotherapeutic drug doxorubicin in the MCF-7 breast cancer cell line

AUTHOR(S): Weinstein-Oppenheimer, Caroline Ruth

CORPORATE SOURCE: East Carolina Univ., Greenville, NC, USA

SOURCE: (2000) 271 pp. Avail.: UMI, Order No. DA9989557

From: Diss. Abstr. Int., B 2001, 61(9), 4580

DOCUMENT TYPE: Dissertation

LANGUAGE: English

ED Entered STN: 18 Jun 2001

AB Unavailable

L615 ANSWER 16 OF 52 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:96426 HCAPLUS Full-text

DOCUMENT NUMBER: 135:55609

TITLE: Detection of P-glycoprotein in the nuclear envelope of multidrug resistant cells

AUTHOR(S): Calcabrini, Annarica; Meschini, Stefania; Stringaro, Annarita; Cianfriglia, Maurizio; Arancia, Giuseppe; Molinari, Agnese

CORPORATE SOURCE: Laboratorio di Ultrastrutture, Istituto Superiore di Sanita, Rome, 00161, Italy

SOURCE: Histochemical Journal (2000), 32(10), 599-606

CODEN: HISJAE; ISSN: 0018-2214

PUBLISHER: Kluwer Academic Publishers

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 08 Feb 2001

AB P-glycoprotein is a plasma membrane efflux pump which is responsible for multidrug resistance of many cancer cell lines. A number of studies have demonstrated the presence of P-glycoprotein mols., besides on the plasma membrane, also in intracellular sites, such as the Golgi apparatus and the nucleus. In this study, the presence and function of P-glycoprotein in the nuclear membranes of human breast cancer cells (MCF-7 WT) and their multidrug resistant variants (MCF-7 DX) were investigated. Electron and confocal microscopy immunolabeling expts. demonstrated the presence of P-glycoprotein mols. in the nuclear membranes of MCF-7 DX cells. Moreover, the labeling pattern was strongly dependent on pH values of the incubation buffer. At physiol. pH (7.2), a strong labeling was detected in the cytoplasm and the

Serial Number: 10/580,507

nuclear matrix in both sensitive and resistant MCF-7 cells. By raising the pH to 8.0, the P-glycoprotein mols. were easily detected in the cytoplasm (transport vesicles and Golgi apparatus), plasma and nuclear membranes exclusively in MCF-7 DX cells. Furthermore, drug uptake and efflux studies, performed by flow cytometry on isolated nuclei in the presence of the P-glycoprotein inhibitor cyclosporin A, suggested the presence of a functional P-glycoprotein in the nuclear membrane, but not in the nuclear matrix, of drug resistant cells. Therefore, P-glycoprotein in the nuclear envelope seems to represent a further defense mechanism developed by resistant cells against antineoplastic agents.

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L615 ANSWER 17 OF 52 MEDLINE on STN DUPLICATE 3
ACCESSION NUMBER: 2006169782 MEDLINE Full-text
DOCUMENT NUMBER: PubMed ID: 16322897
TITLE: cdNA microarray analysis of isogenic paclitaxel-
and doxorubicin-resistant breast tumor cell lines reveals
distinct drug-specific genetic signatures of resistance.
AUTHOR: Villeneuve David J; Hembruff Stacey L; Veitch Zachary;
Cecchetto Melanie; Dew William A; Parissenti Amadeo M
CORPORATE SOURCE: Tumor Biology Research Program, Sudbury Regional Hospital,
Sudbury, Ont., Canada.
SOURCE: Breast cancer research and treatment, (2006 Mar) Vol. 96,
No. 1, pp. 17-39. Electronic Publication: 2005-12-02.
Journal code: 8111104. ISSN: 0167-6806.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: (COMPARATIVE STUDY)
Journal; Article; (JOURNAL ARTICLE)
(RESEARCH SUPPORT, NON-U.S. GOV'T)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200701
ENTRY DATE: Entered STN: 28 Mar 2006
Last Updated on STN: 10 Jan 2007
Entered Medline: 9 Jan 2007

ABSTRACT:
cdNA microarray analysis is a highly useful tool for the classification of tumors and for prediction of patient prognosis to specific cancers based on this classification. However, to date, there is little evidence that microarray approaches can be used to reliably predict patient response to specific chemotherapy drugs or regimens. This is likely due to an inability to differentiate between genes affecting patient prognosis and genes that play a role in response to specific drugs. Thus, it would be highly useful to identify genes whose expression correlates with tumor cell sensitivity to specific chemotherapy agents in a drug-specific manner. Using cdNA microarray analysis of wildtype MCF-7 breast tumor cells and isogenic paclitaxel-resistant (MCF-7(TAX)) or doxorubicin-resistant (MCF-7(DOX)) derivative cell lines, we have uncovered drug-specific changes in gene expression that accompany the establishment of paclitaxel or doxorubicin resistance. These changes in gene expression were confirmed by quantitative reverse transcription polymerase chain reaction and immunoblotting experiments, with a confirmation rate of approximately 91-95%. The genes identified may prove highly useful for prediction of response to paclitaxel or doxorubicin in patients with breast cancer. To our knowledge this is the first report of drug-specific genetic signatures of resistance to paclitaxel or doxorubicin, based on a comparison of gene expression between isogenic wildtype and drug-resistant tumor cell lines. Moreover, this study provides significant insight into the wide variety of mechanisms through which

Serial Number: 10/580,507

resistance to these agents may be acquired in breast cancer.

CONTROLLED TERM: Check Tags: Female

*Antibiotics, Antineoplastic: PD, pharmacology

*Antineoplastic Agents, Phytogenic: PD, pharmacology

*Breast Neoplasms: DT, drug therapy

Breast Neoplasms: GE, genetics

Breast Neoplasms: ME, metabolism

*Doxorubicin: PD, pharmacology

*Drug Resistance, Neoplasm: GE, genetics

Gene Expression Profiling

Gene Expression Regulation, Neoplastic: DE, drug effects

Humans

*Oligonucleotide Array Sequence Analysis

*Paclitaxel: PD, pharmacology

Tumor Cells, Cultured

Tumor Markers, Biological: GE, genetics

*Tumor Markers, Biological: ME, metabolism

CAS REGISTRY NO.: 23214-92-8 (Doxorubicin); 33069-62-4

(Paclitaxel)

CHEMICAL NAME: 0 (Antibiotics, Antineoplastic); 0 (Antineoplastic Agents, Phytogenic); 0 (Tumor Markers, Biological)

L615 ANSWER 18 OF 52 MEDLINE on STN

ACCESSION NUMBER: 2004231656 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 15131056

TITLE: Development of a new isogenic cell-xenograft system for evaluation of NAD(P)H:quinone oxidoreductase-directed antitumor quinones: evaluation of the activity of RH1.

AUTHOR: Dehn Donna L; Winski Shannon L; Ross David

CORPORATE SOURCE: Department of Pharmaceutical Sciences, School of Pharmacy and Cancer Center, University of Colorado Health Sciences Center, Denver, Colorado 80262, USA.

CONTRACT NUMBER: CA-51210 (United States NCI)

SOURCE: Clinical cancer research : an official journal of the American Association for Cancer Research, (2004 May 1) Vol. 10, No. 9, pp. 3147-55.
Journal code: 9502500. ISSN: 1078-0432.

PUB. COUNTRY: United States

DOCUMENT TYPE: (COMPARATIVE STUDY)
Journal; Article; (JOURNAL ARTICLE)
(RESEARCH SUPPORT, NON-U.S. GOV'T)
(RESEARCH SUPPORT, U.S. GOV'T, P.H.S.)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200411

ENTRY DATE: Entered STN: 10 May 2004

Last Updated on STN: 11 Nov 2004

Entered Medline: 10 Nov 2004

ABSTRACT:

PURPOSE: The purpose of our study was to develop and validate an ***isogenic*** cell line pair that differs only in the expression of NAD(P)H:quinone oxidoreductase (NQO1) that can be used to examine the ***in*** vitro and in vivo role of NQO1 in the bioactivation of the antitumor quinone RH1 (2,5-diaziridinyl-3-(hydroxymethyl)-6-methyl-1,4-benzoquinone), a compound currently in Phase I clinical trials. EXPERIMENTAL DESIGN: MDA-MB-468 (MDA468) human breast adenocarcinoma cells, homozygous for a polymorphism in NQO1 (NQO1*2/*2) and with low levels of NQO1 activity, were stably transfected with human NQO1 to generate a clone (NQ16) expressing very high NQO1 activity. We examined levels of other reductases and looked at

Serial Number: 10/580,507

biochemical systems that might influence response to antitumor quinones to validate that the isogenic cell line pair differed only in the expression of NQO1. The 3-(4,5-dimethylthiazol-2,5-diphenyl)tetrazolium (MTT) assay was used to determine the differential toxicity of various quinones, including the most recent NQO1-directed antitumor quinone, RH1, between the two cell lines. Human tumor xenografts were established from both MDA468 and NQ16 cells, and the antitumor activity of RH1 was evaluated.

RESULTS: Levels of cytochrome P450 reductase, cytochrome b(5) reductase, soluble thiols, and superoxide dismutase in the NQ16 line were unchanged from the parental line. The functional significance of wild-type NQO1 expression was confirmed by measurement of the differential toxicity of compounds activated or deactivated by NQO1 in the two cell lines. The toxicity of the NQO1-directed antitumor quinones RH1 and streptonigrin were markedly greater and the toxicity of menadione, which is detoxified by NQO1, was ameliorated in the NQ16 line. High levels of NQO1 expression were observed throughout xenograft tumors established from the NQ16 cell line. RH1 treatment was effective at statistically reducing tumor volume in NQ16 xenografts at all of the doses tested (0.1, 0.2, 0.4 mg/kg every day for 5 days), whereas only the highest dose of RH1 resulted in a significant reduction in tumor volume in MDA468 xenografts. CONCLUSIONS: The MDA468/NQ16 isogenic

cell line pair is a useful model system for evaluating the role of NQO1 in the bioactivation of antitumor quinones in both cell lines and xenografts. In addition, our data demonstrate that the novel antitumor quinone RH1, is effectively activated by NQO1 both in vitro and in vivo.

CONTROLLED TERM: Check Tags: Female
Animals
Aziridines: AD, administration & dosage
Aziridines: AE, adverse effects
*Aziridines: TU, therapeutic use
Benzoquinones: AD, administration & dosage
Benzoquinones: AE, adverse effects
*Benzoquinones: TU, therapeutic use
Cell Division: DE, drug effects
Cell Division: GE, genetics
Cell Line, Tumor
Cisplatin: PD, pharmacology
Comet Assay
DNA, Neoplasm: DE, drug effects
DNA, Neoplasm: GE, genetics
Dose-Response Relationship, Drug
Humans
Immunoblotting
Mice
Mice, Nude
NAD(P)H Dehydrogenase (Quinone): GE, genetics
*NAD(P)H Dehydrogenase (Quinone): ME, metabolism
Time Factors
Transfection
Treatment Outcome
Weight Loss: DE, drug effects
*Xenograft Model Antitumor Assays: MT, methods

CAS REGISTRY NO.: 15663-27-1 (Cisplatin)

CHEMICAL NAME: 0 (2,5-diaziridiny1-3-(hydroxymethyl)-6-methyl-1,4-benzoquinone); 0 (Aziridines); 0 (Benzoquinones); 0 (DNA, Neoplasm); EC 1.6.5.2 (NAD(P)H Dehydrogenase (Quinone)); EC 1.6.99.2 (NQO1 protein, human)

Serial Number: 10/580,507

L615 ANSWER 19 OF 52 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on
STN DUPLICATE 1

ACCESSION NUMBER: 2008:380014 BIOSIS Full-text

DOCUMENT NUMBER: PREV200800380013

TITLE: Effects of drug efflux proteins and topoisomerase I
mutations on the camptothecin analogue gimatecan.

AUTHOR(S): Gounder, Murugesan K.; Nazar, Ahamed S.; Saleem, Ahamed;
Pungaliya, Pooja; Kulkarni, Diptee; Versace, Richard;
Rubin, Eric H. [Reprint Author]

CORPORATE SOURCE: Univ Med and Dent New Jersey, Robert Wood Johnson Med Sch,
Dept Med, New Brunswick, NJ 08903 USA
ehrubin@umdnj.edu

SOURCE: Investigational New Drugs, (JUN 2008) Vol. 26, No. 3, pp.
205-213.

CODEN: INNDDK. ISSN: 0167-6997.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 9 Jul 2008

Last Updated on STN: 9 Jul 2008

ABSTRACT: Clinically relevant resistance to the currently approved
camptothecins, irinotecan and topotecan, is poorly understood but may involve
increased expression of ATP-dependent drug transporters such as ABCG2 (breast
cancer resistant protein, BCRP). Gimatecan (ST1481) is a lipophilic
7-substituted camptothecin derivative that exhibits potent anti-tumor activity
in a variety of preclinical cancer models and is under investigation in the
clinic. Previous studies reported that gimatecan cytotoxicity was not affected
by expression of ABCG2. To confirm and extend this finding, we assessed the
cytotoxicity of gimatecan in pairs of isogenic cell lines
consisting of transfectants expressing either ABCG2 (including wild-type,
R482T, or R482G mutants), ABCB1 (P-glycoprotein), ABCC1 (MRP1), ABCC2 (MRP2),
or ABCC4 (MRP4). Expression of wild-type or mutant ABCG2 in human cell lines
conferred resistance to topotecan but not to gimatecan. Similarly,
intracellular accumulation of gimatecan was unaffected by expression of
wild-type ABCG2. Furthermore, expression of P-glycoprotein or MRP2 did not
alter gimatecan cytotoxicity. Whereas expression of MRP1 had a minor effect on
gimatecan cytotoxicity, expression of ABCC4 was found to significantly reduce
the anti-proliferative effects of this drug. Cells containing
resistance-conferring mutations in topoisomerase I were also resistant to
gimatecan. These results suggest that gimatecan may be more effective than
irinotecan or topotecan in cancers that express ABCG2, but not in cancers that
express high levels of ABCC4 or contain certain topoisomerase I (TOP1)
mutations.

CONCEPT CODE: Cytology - Animal 02506

Cytology - Human 02508

Biochemistry studies - General 10060

Biochemistry studies - Proteins, peptides and amino acids
10064

Biochemistry studies - Carbohydrates 10068

Enzymes - General and comparative studies: coenzymes
10802

Pathology - Therapy 12512

Pharmacology - General 22002

Pharmacology - Clinical pharmacology 22005

Toxicology - General and methods 22501

Toxicology - Pharmacology 22504

Neoplasms - Pathology, clinical aspects and systemic
effects 24004

Neoplasms - Therapeutic agents and therapy 24008

INDEX TERMS: Major Concepts

Pharmacology; Tumor Biology; Enzymology (Biochemistry

Serial Number: 10/580,507

and Molecular Biophysics)

INDEX TERMS: Diseases
tumor: neoplastic disease, drug therapy
Neoplasms (MeSH)

INDEX TERMS: Chemicals & Biochemicals
topotecan: antineoplastic-drug, enzyme inhibitor-drug;
irinotecan: antineoplastic-drug; ABCG2: expression;
topoisomerase I: mutation; ABCB1 [P-glycoprotein] [EC
3.6.3.44]: expression; ABCC1 [MRP1]: expression; ABCC2
[MRP2]: expression; ABCC4: expression; camptothecin
analogs; gimatecan: antineoplastic-drug, toxicity,
efficacy, dosage, toxin, cytotoxin

INDEX TERMS: Miscellaneous Descriptors
drug regimen

ORGANISM: Classifier
Canidae 85765
Super Taxa
Carnivora; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
MDCK cell line (cell_line): Madin-Darby canine kidney
cells
MDCKII cell line (cell_line): Madin-Darby canine kidney
type II cells
Taxa Notes
Animals, Carnivores, Chordates, Mammals, Nonhuman
Vertebrates, Nonhuman Mammals, Vertebrates

ORGANISM: Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
HEK293 cell line (cell_line): human embryonic kidney
cells
Saos-2 cell line (cell_line): human osteosarcoma cells
U-937 cell line (cell_line): human leukemia cells
RPMI-8402 cell line (cell_line): human peripheral blood
myeloma cells
CPT-K5 cell line (cell_line): human acute lymphoblastic
leukemia cells
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates,
Vertebrates

REGISTRY NUMBER: 123948-87-8 (topotecan)
97682-44-5 (irinotecan)
143180-75-0 (topoisomerase I)
292618-32-7 (gimatecan)

L615 ANSWER 20 OF 52 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on
STN DUPLICATE 2

ACCESSION NUMBER: 2007:434342 BIOSIS Full-text

DOCUMENT NUMBER: PREV200700430569

TITLE: Estrogen receptor alpha mediates breast cancer
cell resistance to paclitaxel through inhibition of
apoptotic cell death.

AUTHOR(S): Sui, Meihua; Huang, Yi; Park, Ben Ho; Davidson, Nancy E.;
Fan, Weimin [Reprint Author]

CORPORATE SOURCE: Med Univ S Carolina, Dept Pathol and Lab Med, 165 Ashley
Ave, Charleston, SC 29425 USA
fanw@musc.edu

SOURCE: Cancer Research, (JUN 1 2007) Vol. 67, No. 11, pp.

Serial Number: 10/580,507

5337-5344.

CODEN: CNREA8. ISSN: 0008-5472.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 15 Aug 2007

Last Updated on STN: 15 Aug 2007

ABSTRACT: Estrogen receptors (ER) are expressed in similar to 65% of human breast cancer. Cumulative data from clinical trials and retrospective analyses suggest that some chemotherapeutic agents may be less effective in patients with ER-positive (ER+) tumors than those with ER-negative (ER-) tumors. Paclitaxel is an active agent used in breast cancer chemotherapy. To investigate the possible influence of ER on the therapeutic efficacy of paclitaxel and its underlying mechanism, we established several ***isogenic*** ER+ cell lines by stable transfection of ER alpha expression vectors into ER- breast cancer BCap37 cells. We showed that 17-beta estradiol significantly reduces the overall cytotoxicity of paclitaxel in BCap37-expressing ER alpha but has no influence on the ER- parental cells. Further analyses indicate that expression of ER alpha in BCap37 cells mainly interferes with paclitaxel-induced apoptotic cell death, without affecting paclitaxel-induced microtubule bundling and mitotic arrest. Moreover, we found that the addition of ICI 182,780 (Fulvestrant), a selective ER down-regulator, could completely reverse the resistance of ER+ BCap37 cells to paclitaxel. These findings showed that ER alpha-mediated breast tumor cell resistance to paclitaxel was through selective inhibition of paclitaxel-induced tumor cell apoptosis. Additionally, the combination of ICI 182,780 also sensitizes MCF-7 and T47D cell lines to the treatment of paclitaxel, which further confirmed the correlation between ER alpha, and drug resistance in ER+ tumor cells. The results obtained from this study provide useful information for understanding ER-mediated resistance to paclitaxel and possibly other antineoplastic agents.

CONCEPT CODE: Cytology - Human 02508
Biochemistry studies - General 10060
Pathology - Therapy 12512
Reproductive system - Physiology and biochemistry 16504
Reproductive system - Pathology 16506
Pharmacology - General 22002
Pharmacology - Clinical pharmacology 22005
Neoplasms - Pathology, clinical aspects and systemic effects 24004
Neoplasms - Therapeutic agents and therapy 24008

INDEX TERMS: Major Concepts
Pharmacology; Reproductive System (Reproduction); Tumor Biology

INDEX TERMS: Diseases
breast cancer: neoplastic disease, reproductive system disease/female, drug therapy
Breast Neoplasms (MeSH)

INDEX TERMS: Chemicals & Biochemicals
paclitaxel: antineoplastic-drug; 17-beta estradiol; estrogen receptor-alpha

INDEX TERMS: Miscellaneous Descriptors
drug resistance; cell death; cell apoptosis

ORGANISM: Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
human (common)
MCF-7 cell line (cell_line): human breast cancer cells

Serial Number: 10/580,507

T47D cell line (cell_line): human breast cancer cells

BCap37 cell line (cell_line): human breast cancer cells

Taxa Notes

Animals, Chordates, Humans, Mammals, Primates,
Vertebrates

REGISTRY NUMBER: 33069-62-4 (paclitaxel)
50-28-2 (17-beta estradiol)

L615 ANSWER 21 OF 52 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on
STN DUPLICATE 7

ACCESSION NUMBER: 1996:335830 BIOSIS Full-text

DOCUMENT NUMBER: PREV199699058186

TITLE: Loss of DNA mismatch repair in acquired resistance to
cisplatin.

AUTHOR(S): Aebi, Stefan; Kurdi-Haidar, Buran; Gordon, Robert; Cenni,
Bruno; Zheng, Hua; Fink, Daniel; Christen, Randolph D.;
Boland, C. Richard; Koi, Minoru; Fishel, Richard; Howell,
Stephen B. [Reprint author]

CORPORATE SOURCE: Dep. Med., Cancer Center, Univ. California at San Diego, La
jolla, CA 92093-0812, USA

SOURCE: Cancer Research, (1996) Vol. 56, No. 13, pp. 3087-3090.
CODEN: CNREA8. ISSN: 0008-5472.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 26 Jul 1996

Last Updated on STN: 27 Jul 1996

ABSTRACT: Selection of cells for resistance to cisplatin, a
well-recognized mutagen, could result in mutations in genes involved in DNA
mismatch repair and thereby to resistance to DNA-alkylating agents. Parental
cells of the human ovarian adenocarcinoma cell line 2008 expressed hMLH1 when
analyzed with immunoblot. One subline selected for resistance to
cisplatin (2008/A) expressed no hMLH1, whereas another (2008/C13*5.25)
expressed parental levels. Microsatellite instability was readily demonstrated
in 2008/A cells but not in 2008 and in 2008/C13*5.25 cells. In addition, the
2008/A cells were 2-fold resistant to methyl-nitro-nitrosoguanidine and had a
65-fold elevated mutation rate at the HPRT locus as compared to 2008 cells,
both of which are consistent with the loss of DNA mismatch repair in these
cells. To determine whether the loss of DNA mismatch repair itself contributes
to cisplatin resistance, studies were carried out in isogenic
pairs of cell lines proficient or defective in this function.
HCT116, a human colon cancer cell line deficient in hMLH1 function, was 2-fold
resistant to cisplatin when compared to a subline complemented with
chromosome 3 and expressing hMLH1. Similarly, the human endometrial
cancer cell line HEC59, which expresses no hMSH2, was 2-fold resistant
to cisplatin when compared to a subline complemented with chromosome
2 that expresses hMSH2. Therefore, the selection of cells for resistance to
cisplatin can result in the loss of DNA mismatch repair, and loss of
DNA mismatch repair in turn contributes to resistance to cisplatin.

CONCEPT CODE: Cytology - Human 02508
Genetics - Human 03508
Biochemistry studies - Nucleic acids, purines and
pyrimidines 10062
Biochemistry studies - Minerals 10069
Replication, transcription, translation 10300
Pathology - Therapy 12512
Metabolism - Nucleic acids, purines and pyrimidines 13014
Digestive system - Pathology 14006
Reproductive system - Pathology 16506
Endocrine - Gonads and placenta 17006
Pharmacology - Drug metabolism and metabolic stimulators

Serial Number: 10/580,507

22003

Pharmacology - Clinical pharmacology 22005

Pharmacology - Digestive system 22014

Pharmacology - Endocrine system 22016

Pharmacology - Reproductive system and implantation studies
22028

Neoplasms - Neoplastic cell lines 24005

Neoplasms - Biochemistry 24006

Neoplasms - Therapeutic agents and therapy 24008

Tissue culture, apparatus, methods and media 32500

INDEX TERMS:

Major Concepts

Cell Biology; Endocrine System (Chemical Coordination
and Homeostasis); Gastroenterology (Human Medicine,
Medical Sciences); Genetics; Metabolism; Molecular
Genetics (Biochemistry and Molecular Biophysics);
Oncology (Human Medicine, Medical Sciences);
Pharmacology; Reproductive System (Reproduction)

INDEX TERMS:

Chemicals & Biochemicals

CISPLATIN

INDEX TERMS:

Miscellaneous Descriptors

ANTINEOPLASTIC-DRUG; CISPLATIN;

HCT-116 COLON CANCER CELLS; 2008 OVARIAN CANCER CELLS

ORGANISM:

Classifier

Hominidae 86215

Super Taxa

Primates; Mammalia; Vertebrata; Chordata; Animalia

Organism Name

human

Taxa Notes

Animals, Chordates, Humans, Mammals, Primates,
Vertebrates

REGISTRY NUMBER:

15663-27-1 (CISPLATIN)

L615 ANSWER 22 OF 52 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on
STN

ACCESSION NUMBER: 2008:162757 BIOSIS Full-text

DOCUMENT NUMBER: PREV200800159621

TITLE: Chronic hypoxia decreases synthesis of homologous
recombination proteins to offset chemoresistance and
radioresistance.

AUTHOR(S): Chan, Norman; Koritzinsky, Marianne; Zhao, Helen; Bindra,
Ranjit; Glazer, Peter M.; Powell, Simon; Belmaaza,
Abdellah; Wouters, Brad; Bristow, Robert G. [Reprint
Author]

CORPORATE SOURCE: Univ Toronto, Univ Hlth Network, Princess Margaret Hosp,
Radiat Med Program, 610 Univ Ave, Toronto, ON M5G 2M9,
Canada

Rob.Bristow@rmp.uhn.on.ca

SOURCE: Cancer Research, (JAN 15 2008) Vol. 68, No. 2, pp. 605-614.

CODEN: CNREA8. ISSN: 0008-5472.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 5 Mar 2008

Last Updated on STN: 5 Mar 2008

ABSTRACT: Hypoxic and/or anoxic tumor cells can have increased rates of
mutagenesis and altered DNA repair protein expression. Yet very little is
known regarding the functional consequences of any hypoxia-induced changes in
the expression of proteins involved in DNA double-strand break repair. We have
developed a unique hypoxic model system using H1299 cells expressing an
integrated direct repeat green fluorescent protein (DR-GFP) homologous

Serial Number: 10/580,507

recombination (HR) reporter system to study HR under prolonged chronic hypoxia (up to 72 h under 0.2% O₂) without bias from altered proliferation, cell cycle checkpoint activation, or severe cell toxicity. We observed decreased expression of HR proteins due to a novel mechanism involving decreased HR protein synthesis. Error-free HR was suppressed 3-fold under 0.2% O₂ as measured by the DR-GFP reporter system. This decrease in functional HR resulted in increased sensitivity to the DNA cross-linking agents mitomycin C and cisplatin but not to the microtubule-interfering agent, paclitaxel. Chronically hypoxic H1299 cells that had decreased functional HR were relatively radiosensitive [oxygen enhancement ratio (OER), 1.37] when compared with acutely hypoxic or anoxic cells (OER, 1.96-2.61). Using CAPAN1 ***cells*** isogenic for BRCA2 and siRNA to RAD51, we confirmed that the hypoxia-induced radiosensitivity was due to decreased HR capacity. Persistent down-regulation of HR function by the tumor microenvironment could result in low-fidelity DNA repair and have significant implications for response to therapy and genetic instability in human cancers.

CONCEPT CODE: Cytology - Human 02508
Genetics - General 03502
Genetics - Human 03508
Biochemistry studies - General 10060
Biochemistry studies - Nucleic acids, purines and pyrimidines 10062
Biochemistry studies - Proteins, peptides and amino acids 10064
Pathology - Therapy 12512
Pharmacology - General 22002
Pharmacology - Clinical pharmacology 22005
Neoplasms - Pathology, clinical aspects and systemic effects 24004
Neoplasms - Therapeutic agents and therapy 24008

INDEX TERMS: Major Concepts
Pharmacology; Molecular Genetics (Biochemistry and Molecular Biophysics); Tumor Biology

INDEX TERMS: Diseases
cancer: neoplastic disease, drug therapy
Neoplasms (MeSH)

INDEX TERMS: Chemicals & Biochemicals
paclitaxel: antineoplastic-drug, radiosensitizer-drug; siRNA; cisplatin: antineoplastic-drug, radiosensitizer-drug; mitomycin C: antineoplastic-drug; DNA: repair; green fluorescent protein: reporter system

INDEX TERMS: Miscellaneous Descriptors
cell proliferation; radioresistance; chemoresistance; genetic instability; homologous recombination; cell toxicity; chronic hypoxia; cell cycle checkpoint activation

ORGANISM: Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
H1299 cell line (cell_line): human non-small cell lung cancer cells
CAPAN1 cell line (cell_line): human pancreatic cancer cells
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates, Vertebrates

REGISTRY NUMBER: 33069-62-4 (paclitaxel)
15663-27-1 (cisplatin)

Serial Number: 10/580,507

50-07-7 (mitomycin C)

GENE NAME: human BRCA2 gene (Hominidae); human RAD51 gene (Hominidae)

L615 ANSWER 23 OF 52 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on
STN

ACCESSION NUMBER: 2007:574431 BIOSIS Full-text

DOCUMENT NUMBER: PREV200700575689

TITLE: Mismatch repair status and the response of human cells to
cisplatin.

AUTHOR(S): Pani, Elisabetta; Stojic, Lovorka; El-Shemerly, Mahmoud;
Jiricny, Josef; Ferrari, Stefano [Reprint Author]

CORPORATE SOURCE: Univ Zurich, Inst Mol Canc Res, Winterthurerstr 190,
CH-8057 Zurich, Switzerland
sferrari@imcr.uzh.ch

SOURCE: Cell Cycle, (JUL 15 2007) Vol. 6, No. 14, pp. 1796-1802.
ISSN: 1538-4101. E-ISSN: 1551-4005.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 14 Nov 2007

Last Updated on STN: 14 Nov 2007

ABSTRACT: The emergence of resistance to cisplatin is a serious drawback of cancer therapy. To help elucidate the molecular basis of this resistance, we examined matched ovarian cancer cell lines that differ in their DNA mismatch repair (MMR) status and the response to cisplatin. Checkpoint activation by cisplatin was identical in both lines. However, sensitive cells delayed S-phase transition, arrested at G(2)/M and died by apoptosis. The G(2)/M block was characterized by selective disappearance of homologous recombination (HR) proteins, which likely resulted in incomplete repair of the cisplatin adducts. In contrast, resistant cells transiently arrested at G(2)/M, maintained constant levels of HR proteins and ultimately resumed cell cycle progression. The net contribution of MMR to the cisplatin response was examined using matched semi-isogenic (HCT116 +/- chr3) or strictly isogenic (293T-L alpha(-/+)) cell lines. Delayed transition through S-phase in response to cisplatin was also observed in the MMR-proficient HCT116+chr3 cells. Unlike in the ovarian cell lines, however, both HCT116+chr3 and HCT116 permanently arrested at G(2)/M with an intact complement of HR proteins and died by apoptosis. A similar G(2)/M arrest was observed in the strictly ***isogenic*** 293T-L alpha(-/+) cells. This confirmed that although MMR undoubtedly contributes towards the cytotoxicity of cisplatin, it is only one of several pathways that modulate the cellular response to this drug. However, our data highlighted the importance of HR to cisplatin cytotoxicity and suggested that HR status might represent a novel prognostic marker and possibly also a therapeutic target, the inhibition of which would substantially sensitize cells to cisplatin chemotherapy.

CONCEPT CODE: Cytology - General 02502
Cytology - Human 02508
Biochemistry studies - General 10060
Biochemistry studies - Nucleic acids, purines and
pyrimidines 10062
Pathology - Therapy 12512
Pharmacology - General 22002
Pharmacology - Clinical pharmacology 22005
Toxicology - General and methods 22501
Toxicology - Pharmacology 22504
Neoplasms - Pathology, clinical aspects and systemic
effects 24004
Neoplasms - Therapeutic agents and therapy 24008

INDEX TERMS: Major Concepts
Pharmacology; Tumor Biology; Biochemistry and Molecular
Biophysics; Cell Biology

Serial Number: 10/580,507

INDEX TERMS: Diseases
cancer: neoplastic disease
Neoplasms (MeSH)

INDEX TERMS: Chemicals & Biochemicals
DNA; cisplatin: antineoplastic-drug,
radiosensitizer-drug, toxicity

INDEX TERMS: Miscellaneous Descriptors
cell apoptosis; homologous recombination; S-phase;
checkpoint activation; G2/M arrest; mismatch repair
status

ORGANISM: Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
human (common)
HCT116 cell line (cell_line): human colonic epithelial
cells
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates,
Vertebrates

REGISTRY NUMBER: 15663-27-1 (cisplatin)

L615 ANSWER 24 OF 52 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on
STN

ACCESSION NUMBER: 2007:457383 BIOSIS Full-text
DOCUMENT NUMBER: PREV200700458310
TITLE: The direct p53 target gene, FLJ11259/DRAM, is a member of a
novel family of transmembrane proteins.
AUTHOR(S): Kerley-Hamilton, Joanna S.; Pike, Aimee M.; Hutchinson,
Justine A.; Freemantle, Sarah J.; Spinella, Michael J.
[Reprint Author]
CORPORATE SOURCE: Dartmouth Coll Sch Med, Dept Pharmacol and Toxicol, 7650
Remsen, Hanover, NH 03755 USA
michael.Spinella@Dartmouth.EDU
SOURCE: Biochimica et Biophysica Acta, (APR 2007) Vol. 1769, No. 4,
pp. 209-219.
ISSN: 0167-4781.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 29 Aug 2007
Last Updated on STN: 29 Aug 2007

ABSTRACT: The tumor suppressor p53 regulates diverse biological processes primarily via activation of downstream target genes. Even though many p53 target genes have been described, the precise mechanisms of p53 biological actions are uncertain. In previous work we identified by microarray analysis a candidate p53 target gene, FLJ11259/DRAM. In this report we have identified three uncharacterized human proteins with sequence homology to FLJ11259, suggesting that FLJ11259 is a member of a novel family of proteins with six transmembrane domains. Several lines of investigation confirm FLJ11259 is a direct p53 target gene. p53 siRNA prevented cisplatin-mediated upregulation of FLJ11259 in NT2/D1 cells. Likewise in HCT116 p53+/+ cells and MCF10A cells, FLJ11259 is induced by cisplatin treatment but to a much lesser extent in isogenic p53-suppressed cells. A functional p53 response element was identified 22.3 kb upstream of the first coding exon of FLJ11259 and is shown to be active in reporter assays. In addition, chromatin immunoprecipitation assays indicate that p53 binds directly to this element in vivo and that binding is enhanced following ***cisplatin*** treatment. Confocal microscopy showed that an FLJ-GFP fusion protein localizes mainly in a punctate pattern in the cytoplasm.

Serial Number: 10/580,507

Overexpression studies in Cos-7, Saos2, and NT2/D1 cells suggest that FLJ11259 is associated with increased clonal survival. In summary, we have identified FLJ11259/DRAM as a p53-inducible member of a novel family of transmembrane proteins. FLJ11259/DRAM may be an important modulator of p53 responses in diverse tumor types. (C) 2007 Elsevier B.V. All rights reserved.

CONCEPT CODE: Cytology - Animal 02506
Cytology - Human 02508
Genetics - General 03502
Genetics - Animal 03506
Genetics - Human 03508
Biochemistry studies - General 10060
Biochemistry studies - Nucleic acids, purines and pyrimidines 10062
Biochemistry studies - Proteins, peptides and amino acids 10064
Pathology - Therapy 12512
Pharmacology - General 22002
Pharmacology - Clinical pharmacology 22005
Neoplasms - Pathology, clinical aspects and systemic effects 24004
Neoplasms - Therapeutic agents and therapy 24008

INDEX TERMS: Major Concepts
Pharmacology; Tumor Biology; Molecular Genetics (Biochemistry and Molecular Biophysics)

INDEX TERMS: Parts, Structures, & Systems of Organisms
cytoplasm

INDEX TERMS: Chemicals & Biochemicals
genes; cisplatin: antineoplastic
-drug; p53: tumor suppressor; FLJ-GFP fusion protein; FLJ11259/DRAM: candidate p53 target gene

INDEX TERMS: Methods & Equipment
confocal microscopy: laboratory techniques, imaging and microscopy techniques; microarray analysis: laboratory techniques, genetic techniques; chromatin immunoprecipitation assay: laboratory techniques

INDEX TERMS: Miscellaneous Descriptors
cell survival

ORGANISM: Classifier
Cercopithecidae 86205
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
Cos-7 cell line (cell_line): African green monkey kidney fibroblast cells
Taxa Notes
Animals, Chordates, Mammals, Nonhuman Mammals, Nonhuman Vertebrates, Nonhuman Primates, Primates, Vertebrates

ORGANISM: Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
HCT116 cell line (cell_line): human colon cancer cells
NT2/D1 cell line (cell_line): human embryonal carcinoma cells
MCF10A cell line (cell_line): human breast cancer cells
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates, Vertebrates

Serial Number: 10/580,507

REGISTRY NUMBER: 15663-27-1 (cisplatin)

L615 ANSWER 25 OF 52 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on
STN

ACCESSION NUMBER: 2007:86493 BIOSIS Full-text

DOCUMENT NUMBER: PREV200700086850

TITLE: 35th Annual Meeting of the
Western-Association-of-Gynecologic-Oncologists, Lake Tahoe,
CA, USA, May 31 -June 03, 2006.

AUTHOR(S): Anonymous

SOURCE: Gynecologic Oncology, (NOV 2006) Vol. 103, No. 2, pp.
767-780.

Meeting Info.: 35th Annual Meeting of the
Western-Association-of-Gynecologic-Oncologists. Lake Tahoe,
CA, USA. May 31 -June 03, 2006. Western Assoc Gynecol
Oncol.

CODEN: GYNOA3. ISSN: 0090-8258.

DOCUMENT TYPE: Conference; (Meeting)
Conference; (Meeting Summary)

LANGUAGE: English

ENTRY DATE: Entered STN: 31 Jan 2007

Last Updated on STN: 31 Jan 2007

ABSTRACT:This meeting summary contains 27 English meeting abstracts of the
Thirty-Fifth Annual Meeting of the Western Association of Gynecologic
Oncologists. Topics covered include; cancer patient epidemiology,
fertility-sparing surgery and it's associated risks, novel anti-cancer agents,
pathological biomarkers, radiotherapy and tumor imaging methods.

CONCEPT CODE: General biology - Symposia, transactions and proceedings
00520

Cytology - Animal 02506

Cytology - Human 02508

Genetics - Animal 03506

Genetics - Human 03508

Radiation biology - Radiation and isotope techniques
06504

Biochemistry studies - General 10060

Biochemistry studies - Proteins, peptides and amino acids
10064

Biochemistry studies - Minerals 10069

Anatomy and Histology - Surgery 11105

Pathology - General 12502

Pathology - Therapy 12512

Digestive system - Pathology 14006

Reproductive system - Physiology and biochemistry 16504

Reproductive system - Pathology 16506

Pharmacology - General 22002

Pharmacology - Clinical pharmacology 22005

Neoplasms - Pathology, clinical aspects and systemic
effects 24004

Neoplasms - Therapeutic agents and therapy 24008

Gerontology 24500

Development and Embryology - Pathology 25503

Public health: epidemiology - Organic diseases and
neoplasms 37054

Public health: epidemiology - Miscellaneous 37056

INDEX TERMS: Major Concepts

Surgery (Medical Sciences); Pharmacology; Methods and
Techniques; Oncology (Human Medicine, Medical Sciences);
Radiology (Medical Sciences); Epidemiology (Population
Studies); Gynecology (Human Medicine, Medical Sciences)

Serial Number: 10/580,507

INDEX TERMS: Parts, Structures, & Systems of Organisms
ovary: reproductive system

INDEX TERMS: Diseases
epithelial ovarian cancer: neoplastic disease,
reproductive system disease/female
Ovarian Neoplasms (MeSH)

INDEX TERMS: Diseases
teratoma: neoplastic disease, epidemiology
Teratoma (MeSH)

INDEX TERMS: Diseases
uterine papillary serous carcinoma: neoplastic disease,
reproductive system disease/female
Carcinoma (MeSH); Uterine Neoplasms
(MeSH)

INDEX TERMS: Diseases
vulvar cancer: neoplastic disease, reproductive system
disease/female, epidemiology
Vulvar Neoplasms (MeSH)

INDEX TERMS: Diseases
dysgerminoma: neoplastic disease, epidemiology
Dysgerminoma (MeSH)

INDEX TERMS: Diseases
yolk sac tumor: neoplastic disease, reproductive system
disease/female, epidemiology

INDEX TERMS: Diseases
cervical adenocarcinoma in situ: neoplastic disease,
reproductive system disease/female, etiology, surgery

INDEX TERMS: Diseases
advanced cervical cancer: neoplastic disease,
reproductive system disease/female, radiotherapy
Cervix Neoplasms (MeSH)

INDEX TERMS: Diseases
hereditary non-polyposis colorectal cancer: digestive
system disease, genetic disease, neoplastic disease,
congenital disease, surgery
Colorectal Neoplasms, Hereditary Nonpolyposis
(MeSH)

INDEX TERMS: Diseases
uterine cancer: neoplastic disease, reproductive system
disease/female, pathology
Uterine Neoplasms (MeSH)

INDEX TERMS: Diseases
uterine corpus cancer: neoplastic disease, reproductive
system disease/female, mortality
Uterine Neoplasms (MeSH)

INDEX TERMS: Chemicals & Biochemicals
NF-kappa-B [nuclear factor-kappa-B]; topotecan:
antineoplastic-drug, enzyme inhibitor-drug; platinum:
antineoplastic-drug; pegylated liposomal doxorubicin:
antineoplastic-drug; secreted protein acidic and rich in
cysteine [SPARC]: antineoplastic-drug; curcumin
[diferuoylmethane]: antineoplastic-drug, enzyme
inhibitor-drug

INDEX TERMS: Methods & Equipment
fertility-sparing surgery: therapeutic and prophylactic
techniques, clinical techniques; high dose rate
interstitial brachytherapy: therapeutic and prophylactic
techniques, clinical techniques; laparoscopic sentinel
lymph node mapping: imaging and microscopy techniques,
diagnostic techniques, clinical techniques; endometrial

Serial Number: 10/580,507

tissue sampling: clinical techniques, diagnostic techniques

INDEX TERMS: Miscellaneous Descriptors
drug resistance; pregnancy;
survivorship pattern

ORGANISM: Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
human (common): middle age, aged/80 and over, female
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates,
Vertebrates

ORGANISM: Classifier
Muridae 86375
Super Taxa
Rodentia; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
mouse (common)
OSE1D8 cell line (cell_line): mouse ovarian cancer cells
Taxa Notes
Animals, Chordates, Mammals, Nonhuman Vertebrates,
Nonhuman Mammals, Rodents, Vertebrates

REGISTRY NUMBER: 123948-87-8 (topotecan)
7440-06-4 (platinum)
458-37-7 (curcumin)
458-37-7 (diferuoylmethane)

L615 ANSWER 26 OF 52 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on
STN

ACCESSION NUMBER: 2006:201448 BIOSIS Full-text

DOCUMENT NUMBER: PREV200600198828

TITLE: BCL-2 antisense and cisplatin combination
treatment of MCF-7 breast cancer cells
with or without functional p53.

AUTHOR(S): Basma, Hesham; El-Refaey, Hesham; Sgagias, Magdalene K.;
Cowan, Kenneth H.; Luo, Xu; Cheng, Pi-Wan [Reprint Author]
CORPORATE SOURCE: Coll Med, Dept Biochem and Mol Biol, Omaha, NE 68198 USA
pcheng@unmc.edu

SOURCE: Journal of Biomedical Science, (DEC 2005) Vol. 12, No. 6,
pp. 999-1011.
ISSN: 1021-7770.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 22 Mar 2006

Last Updated on STN: 22 Mar 2006

ABSTRACT: Chemotherapy has been used for treatment of breast

cancer but with limited success. We characterized the effects of bcl-2
antisense and cisplatin combination therapy in two human

isogenic breast carcinoma cells p53(+)MCF-7 and
p53(-)MCF-7/E6. The transferrin-facilitated lipofection strategy we have
developed yielded same transfection efficiency in both cells. Bcl-2 antisense
delivered with this strategy significantly induced more cell death, apoptosis,
and cytochrome c release in MCF-7/E6 than in MCF-7, but did not affect Fas
level in both cells and activated caspase-8 equally. Cisplatin
exerted same effects on cell viability and apoptosis in both cells, but
released smaller amounts of cytochrome c while activated more caspase-8 in
MCF-7/E6. The combination treatment yielded greater effects on cell viability,
apoptosis, cytochrome c release, and caspase-8 activation than individual

Serial Number: 10/580,507

treatments in both cells although p53(-) cells were more sensitive. The potentiated activation of caspase-8 in the combination treatment suggested that caspase-8-mediated (but cytochrome c-independent) apoptotic pathway is the major contributor of the enhanced cell killing. Thus, bcl-2 antisense delivered with transferrin-facilitated lipofection can achieve the efficacy of killing breast cancer cells and sensitizing them to chemotherapy. Bcl-2 antisense and cisplatin combination treatment is a potentially useful therapeutic strategy for breast cancer irrespective of p53 status.

CONCEPT CODE: Cytology - Human 02508
Biochemistry studies - General 10060
Biochemistry studies - Proteins, peptides and amino acids 10064
Enzymes - General and comparative studies: coenzymes 10802
Pathology - Therapy 12512
Reproductive system - Physiology and biochemistry 16504
Pharmacology - General 22002
Pharmacology - Clinical pharmacology 22005
Neoplasms - Pathology, clinical aspects and systemic effects 24004
Neoplasms - Therapeutic agents and therapy 24008

INDEX TERMS: Major Concepts
Pharmacology; Tumor Biology; Reproductive System (Reproduction)

INDEX TERMS: Chemicals & Biochemicals
transferrin; caspase-8; cytochrome c; Fas;
cisplatin: antineoplastic-drug; p53;
bcl-2 antisense: antineoplastic-drug

INDEX TERMS: Miscellaneous Descriptors
apoptosis

ORGANISM: Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
MCF-7 cell line (cell_line): human breast cancer cells
MCF-7/E6 cell line (cell_line): human breast cancer cells
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates, Vertebrates

REGISTRY NUMBER: 179241-78-2 (caspase-8)
9007-43-6 (cytochrome c)
15663-27-1 (cisplatin)

L615 ANSWER 27 OF 52 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN

ACCESSION NUMBER: 2005:243328 BIOSIS Full-text
DOCUMENT NUMBER: PREV200510027174
TITLE: The mTOR inhibitor RAD001 sensitizes tumor cells to DNA-damaged induced apoptosis through inhibition of p21 translation.
AUTHOR(S): Beuvink, Iwan; Boulay, Anne; Fumagalli, Stefano; Zilbermann, Frederic; Ruetz, Stephan; O'Reilly, Terence; Natt, Francois; Hall, Jonathan; Lane, Heidi A. [Reprint Author]; Thomas, George
CORPORATE SOURCE: Friedrich Miescher Inst Biomed Res, Maulbeerstr 66, POB 2543, CH-4058 Basel, Switzerland

Serial Number: 10/580,507

SOURCE: heidi.lane@pharma.novartis.com; gthomas@fmi.ch
Cell, (MAR 25 2005) Vol. 120, No. 6, pp. 747-759.
CODEN: CELLB5. ISSN: 0092-8674.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 29 Jun 2005

Last Updated on STN: 29 Jun 2005

ABSTRACT: Although DNA damaging agents have revolutionized chemotherapy against solid tumors, a narrow therapeutic window combined with severe side effects has limited their broader use. Here we show that RAD001 (everolimus), a rapamycin derivative, dramatically enhances cisplatin-induced apoptosis in wild-type p53, but not mutant p53 tumor cells. The use of isogenic tumor
cell lines expressing either wild-type mTOR cDNA or a mutant that does not bind RAD001 demonstrates that the effects of RAD001 are through inhibition of mTOR function. We further show that RAD001 sensitizes cells to cisplatin by inhibiting p53-induced p21 expression. Unexpectedly, this effect is attributed to a small but significant inhibition of p21 translation combined with its short half-life. These findings provide the molecular rationale for combining DNA damaging agents with RAD001, showing that a general effect on a major anabolic process may dramatically enhance the efficacy of an established drug protocol in the treatment of cancer patients with solid tumors.

CONCEPT CODE: Cytology - Human 02508
Biochemistry studies - General 10060
Biochemistry studies - Nucleic acids, purines and pyrimidines 10062
Biochemistry studies - Proteins, peptides and amino acids 10064
Pathology - Therapy 12512
Pharmacology - General 22002
Neoplasms - Pathology, clinical aspects and systemic effects 24004
Neoplasms - Therapeutic agents and therapy 24008

INDEX TERMS: Major Concepts
Biochemistry and Molecular Biophysics; Pharmaceuticals (Pharmacology); Tumor Biology

INDEX TERMS: Diseases
solid tumor: neoplastic disease, drug therapy
Neoplasms (MeSH)

INDEX TERMS: Chemicals & Biochemicals
DNA; cisplatin: antineoplastic-drug; p53; p21: expression; RAD001 [everolimus]: antineoplastic-drug

INDEX TERMS: Miscellaneous Descriptors
apoptosis

ORGANISM: Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
A549 cell line (cell_line)
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates, Vertebrate

REGISTRY NUMBER: 15663-27-1 (cisplatin)
159351-69-6 (RAD001)
159351-69-6 (everolimus)

L615 ANSWER 28 OF 52 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN

ACCESSION NUMBER: 2005:473276 BIOSIS Full-text

DOCUMENT NUMBER: PREV200510263095

Serial Number: 10/580,507

TITLE: Discovery of STA-5312: A novel microtubule inhibitor demonstrating potent in vitro and in vivo antitumor activities against MDR cancers.

AUTHOR(S): Sun, Lijun [Reprint Author]; Koya, Keizo; Li, Hao; Przewloka, Teresa; James, David; Chen, Shoujun; Xia, Zhiqiang; Liang, Guiqing; Tatsuta, Noriaki; Wu, Yaming; Zhou, Dan; Korbut, Timothy; Du, Zhenjian; Ono, Mitsunori

CORPORATE SOURCE: Synta Pharmaceut Corp, Lexington, MA 02421 USA

SOURCE: Abstracts of Papers American Chemical Society, (AUG 22 2004) Vol. 228, No. Part 1, pp. U924.
Meeting Info.: Meeting of the Division of Chemical Toxicology of the American-Chemical-Society held at the 228th National Meeting of the American-Chemical-Society. Philadelphia, PA, USA. August 22 -26, 2004. Amer Chem Soc, Div Chem Toxicol.
CODEN: ACSRAL. ISSN: 0065-7727.

DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 16 Nov 2005
Last Updated on STN: 16 Nov 2005

CONCEPT CODE: General biology - Symposia, transactions and proceedings 00520
Cytology - Human 02508
Biochemistry studies - General 10060
Biochemistry studies - Proteins, peptides and amino acids 10064
Biochemistry studies - Carbohydrates 10068
Pathology - Therapy 12512
Digestive system - Physiology and biochemistry 14004
Digestive system - Pathology 14006
Blood - Blood, lymphatic and reticuloendothelial pathologies 15006
Reproductive system - Physiology and biochemistry 16504
Reproductive system - Pathology 16506
Pharmacology - General 22002
Pharmacology - Clinical pharmacology 22005
Neoplasms - Pathology, clinical aspects and systemic effects 24004
Neoplasms - Therapeutic agents and therapy 24008
Neoplasms - Blood and reticuloendothelial neoplasms 24010
Immunology - Immunopathology, tissue immunology 34508

INDEX TERMS: Major Concepts
Pharmacology; Clinical Immunology (Human Medicine, Medical Sciences); Gastroenterology (Human Medicine, Medical Sciences); Hematology (Human Medicine, Medical Sciences); Oncology (Human Medicine, Medical Sciences); Gynecology (Human Medicine, Medical Sciences)

INDEX TERMS: Parts, Structures, & Systems of Organisms
breast: reproductive system; colon: digestive system; uterus: reproductive system

INDEX TERMS: Diseases
leukemia: neoplastic disease, blood and lymphatic disease
Leukemia (MeSH)

INDEX TERMS: Diseases
colon cancer: digestive system disease, neoplastic disease
Colonic Neoplasms (MeSH)

INDEX TERMS: Diseases

Serial Number: 10/580,507

breast cancer: neoplastic disease, reproductive system
disease/female
Breast Neoplasms (MeSH)

INDEX TERMS: Diseases
lymphoma: neoplastic disease, immune system disease,
blood and lymphatic disease
Lymphoma (MeSH)

INDEX TERMS: Diseases
uterine cancer: neoplastic disease, reproductive system
disease/female
Uterine Neoplasms (MeSH)

INDEX TERMS: Chemicals & Biochemicals
P-glycoprotein [EC 3.6.3.44]; paclitaxel:
antineoplastic-drug; vincristine: antineoplastic-drug;
adriamycin: antineoplastic-drug; STA-5312:
antineoplastic-drug, novel indolizine microtubule
inhibitor, phase I clinical trial

INDEX TERMS: Methods & Equipment
chemotherapy: therapeutic and prophylactic techniques,
clinical techniques

INDEX TERMS: Miscellaneous Descriptors
multi-drug resistance

ORGANISM: Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
hematologic cancer cell line (cell_line)
solid tumor cell line (cell_line)
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates,
Vertebrates

REGISTRY NUMBER: 33069-62-4 (paclitaxel)
57-22-7 (vincristine)
25316-40-9 (adriamycin)

L615 ANSWER 29 OF 52 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on
STN

ACCESSION NUMBER: 2004:460701 BIOSIS Full-text

DOCUMENT NUMBER: PREV200400460511

TITLE: Homologous recombination is a highly conserved determinant
of the synergistic cytotoxicity between cisplatin and DNA
topoisomerase I poisons.

AUTHOR(S): van Waardenburg, Robert C. A. M.; de Jong, Laurina A.; van
Delft, Foke; van Eijndhoven, Maria A. J.; Bohlander,
Melanie; Bjornsti, Mary-Ann; Brouwer, Jaap; Schellens, Jan
H. M. [Reprint Author]

CORPORATE SOURCE: Div Med OncolDept Expt Therapy, Netherlands Canc Inst,
Plesmanlaan 121, NL-1066 CX, Amsterdam, Netherlands
jhm@nki.nl

SOURCE: Molecular Cancer Therapeutics, (April 2004) Vol. 3, No. 4,
pp. 393-402. print.
ISSN: 1535-7163 (ISSN print).

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 1 Dec 2004

Last Updated on STN: 1 Dec 2004

ABSTRACT:Phase I and II clinical trails are currently investigating the
antitumor activity of cisplatin and camptothecins (CPTs; DNA topoisomerase I
poisons), based on the dramatic synergistic cytotoxicity of these agents in

Serial Number: 10/580,507

some preclinical models. However, the mechanistic basis for this synergism is poorly understood. By exploiting the evolutionary conservation of DNA repair pathways from genetically tractable organisms such as budding and fission yeasts to mammalian cells, we demonstrate that the synergism of CPT and cisplatin requires homologous recombination. In yeast and mammalian cell lines defective for RAD52 and XRCC2/3, respectively, the combination of these agents proved antagonistic, while greater than additive activity was evident in ***isogenic*** wild-type cells. Homologous recombination appears to mediate a similar interaction of X-rays and CPT, but antagonizes the synergism of cytarabine (Ara-C) with CPT. These findings suggest that homologous recombination comprises an evolutionarily conserved determinant of cellular sensitivity when CPTs are used in combination with other therapeutics.

CONCEPT CODE: Genetics - General 03502
Genetics - Plant 03504
Biochemistry studies - General 10060
Biochemistry studies - Nucleic acids, purines and pyrimidines 10062
Enzymes - General and comparative studies: coenzymes 10802
Pathology - Therapy 12512
Pharmacology - General 22002
Pharmacology - Clinical pharmacology 22005
Neoplasms - Pathology, clinical aspects and systemic effects 24004
Neoplasms - Therapeutic agents and therapy 24008
Plant physiology - Enzymes 51518

INDEX TERMS: Major Concepts
Enzymology (Biochemistry and Molecular Biophysics);
Molecular Genetics (Biochemistry and Molecular Biophysics); Pharmacology; Tumor Biology

INDEX TERMS: Diseases
cancer: neoplastic disease
Neoplasms (MeSH)

INDEX TERMS: Chemicals & Biochemicals
DNA: repair; DNA topoisomerase I [EC 5.99.1.2];
camptothecin: antineoplastic-drug, enzyme inhibitor-drug, phase I clinical trial, phase II clinical trial; cisplatin: antineoplastic-drug, phase I clinical trial, phase II clinical trial; cytarabine: antineoplastic-drug

INDEX TERMS: Miscellaneous Descriptors
homologous recombination

ORGANISM: Classifier
Ascomycetes 15100
Super Taxa
Fungi; Plantae
Organism Name
Saccharomyces cerevisiae (species)
Schizosaccharomyces pombe (species)
Taxa Notes
Fungi, Microorganisms, Nonvascular Plants, Plants

REGISTRY NUMBER: 143180-75-0 (DNA topoisomerase I)
80449-01-0 (DNA topoisomerase I)
143180-75-0 (EC 5.99.1.2)
80449-01-0 (EC 5.99.1.2)
7689-03-4 (camptothecin)
15663-27-1 (cisplatin)
147-94-4 (cytarabine)

STN

ACCESSION NUMBER: 2005:476354 BIOSIS Full-text
DOCUMENT NUMBER: PREV200510268258
TITLE: Defibrotide (DF) targets tumor-microenvironmental interactions and sensitizes multiple myeloma and solid tumor cells to cytotoxic chemotherapeutics.
AUTHOR(S): Mitsiades, Constantine S. [Reprint Author]; Rouleau, Cecile; Menon, Krishna; Teicher, Beverly; Iacobelli, Massimo; Anderson, Kenneth C.; Richardson, Paul G.
CORPORATE SOURCE: Dana Farber Canc Inst, Jerome Lipper Multiple Myeloma Ctr, Dept Med Oncol, Boston, MA 02115 USA
SOURCE: Blood, (NOV 16 2004) Vol. 104, No. 11, Part 1, pp. 85A.
Meeting Info.: 46th Annual Meeting of the American-Society-of-Hematology. San Diego, CA, USA. December 04 -07, 2004. Amer Soc Hematol.
CODEN: BLOOAW. ISSN: 0006-4971.
DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LANGUAGE: English
ENTRY DATE: Entered STN: 16 Nov 2005
Last Updated on STN: 16 Nov 2005

ABSTRACT:Introduction: Defibrotide (DF) is a polydisperse oligonucleotide with anti -thrombotic, thrombolytic, anti-ischemic, and anti-adhesive properties, which selectively targets the microvasculature and has minimal hemorrhagic risk. DF is an effective treatment for veno-occlusive disease (VOD), an important regimen-related toxicity in stem cell transplantation characterized by endothelial cell injury. DF also augments stem cell mobilization by modulating adhesion in vivo. Because of its cytoprotective effect on the endothelium, we specifically investigated whether DF protects tumor cells from cytotoxic anti-tumor agents. Further, because of its broad anti-adhesive properties, we evaluated whether DF modulates the interaction of MM cells with bone marrow stromal cells (BMSCs), which confers growth, survival and ***drug*** resistance in the BM milieu.Methods: In vitro studies in ***isogenic*** dexamethasone (Dex)-sensitive and resistant MM cell lines (MM-1S and MM1R, respectively) showed that DF does not attenuate the sensitivity of MM cells to Dex, the proteasome inhibitor bortezomib (PS-341), melphalan (MEL), vinca alkaloids (vincristine, vinblastine), taxanes (paclitaxel) or platinum (cisplatin), but does decrease their sensitivity to doxorubicin. These selective effects in vitro of DF in protecting tumor cells against doxorubicin and modestly sensitizing MM cells to platinum was also confirmed in solid tumor ***breast*** (MCF-7) and colon (HT-29) carcinoma cell lines. Although DF had minimal in vitro inhibitory effect on MM or solid tumor cell growth in vitro, it showed in vivo activity as a single agent and enhanced the responsiveness of MM tumors to cytotoxic chemotherapeutics, such as MEL or ***cyclophosphamide***, in human MM xenografts in SCID/NOD mice. The in vivo single-agent activity and chemosensitizing properties of DF, coupled with its lack of major in vitro activity, suggested that DF may not directly target tumor cells, but rather modulate tumor cell interaction with BMSCs. In an ex vivo model of co-culture of primary MM tumor cells with BMSCs (which protects MM cells against conventional chemotherapy), DF alone had a only modest effect on tumor cell viability, but it significantly enhanced MM cell sensitivity to cytotoxic chemotherapy (e.g. MEL), suggesting that a major component of the biological effects of DF may be attributable not to direct targeting of tumor cells, but to modulation of the interactions that tumor cells develop with the local stromal milieu.Conclusion: Our studies show that DF mediates in vivo anti-MM activity by abrogating interactions of MM cells with their BM milieu, thereby enhancing sensitivity and overcoming resistance to conventional chemotherapy. These data support future clinical trials of DF, in combination

Serial Number: 10/580,507

with both conventional and novel therapies, to improve patient outcome in MM.

CONCEPT CODE: General biology - Symposia, transactions and proceedings
00520
Cytology - General 02502
Cytology - Animal 02506
Cytology - Human 02508
Biochemistry studies - General 10060
Biochemistry studies - Proteins, peptides and amino acids
10064
Biochemistry studies - Minerals 10069
Pathology - Therapy 12512
Blood - Blood and lymph studies 15002
Blood - Blood cell studies 15004
Blood - Blood, lymphatic and reticuloendothelial
pathologies 15006
Pharmacology - General 22002
Pharmacology - Clinical pharmacology 22005
Pharmacology - Blood and hematopoietic agents 22008
Pharmacology - Cardiovascular system 22010
Neoplasms - Pathology, clinical aspects and systemic
effects 24004
Neoplasms - Blood and reticuloendothelial neoplasms 24010
Immunology - Immunopathology, tissue immunology 34508

INDEX TERMS: Major Concepts
Pharmacology; Clinical Immunology (Human Medicine,
Medical Sciences); Hematology (Human Medicine, Medical
Sciences); Cell Biology

INDEX TERMS: Parts, Structures, & Systems of Organisms
bone marrow stromal cell: blood and lymphatics

INDEX TERMS: Diseases
multiple myeloma: neoplastic disease, immune system
disease, blood and lymphatic disease, drug therapy
Multiple Myeloma (MeSH)

INDEX TERMS: Diseases
veno-occlusive disease: blood and lymphatic disease,
drug therapy

INDEX TERMS: Chemicals & Biochemicals
defibrotide: cardiovascular-drug, antithrombotic-drug,
hematologic-drug; bortezomib: enzyme inhibitor-drug,
antithrombotic-drug, hematologic-drug,
cardiovascular-drug; melphalan: cardiovascular-drug,
antithrombotic-drug, hematologic-drug; vinca alkaloids:
cardiovascular-drug, antithrombotic-drug,
hematologic-drug; taxane: cardiovascular-drug,
antithrombotic-drug, hematologic-drug; platinum:
cardiovascular-drug, antithrombotic-drug,
hematologic-drug; doxorubicin:
cardiovascular-drug, antithrombotic-drug,
hematologic-drug; cyclophosphamide:
cardiovascular-drug, antithrombotic-drug,
hematologic-drug

INDEX TERMS: Miscellaneous Descriptors
drug resistance; cell viability;
cell interaction; cell sensitivity;
tumor-microenvironmental interaction; cytotoxic
chemotherapeutic

ORGANISM: Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia

Serial Number: 10/580,507

Organism Name

MM cell line (cell_line): multiple myeloma cells

MCF-7 cell line (cell_line): solid tumor

breast cells

HT-29 cell line (cell_line): colon carcinoma cells

Taxa Notes

Animals, Chordates, Humans, Mammals, Primates,

Vertebrates

ORGANISM:

Classifier

Muridae 86375

Super Taxa

Rodentia; Mammalia; Vertebrata; Chordata; Animalia

Organism Name

mouse (common)

Taxa Notes

Animals, Chordates, Mammals, Nonhuman Vertebrates,

Nonhuman Mammals, Rodents, Vertebrates

REGISTRY NUMBER:

83712-60-1 (defibrotide)

179324-69-7 (bortezomib)

148-82-3 (melphalan)

1605-68-1 (taxane)

7440-06-4 (platinum)

23214-92-8 (doxorubicin)

50-18-0 (cyclophosphamide)

L615 ANSWER 31 OF 52 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on
STN

ACCESSION NUMBER: 2003:292490 BIOSIS Full-text

DOCUMENT NUMBER: PREV200300292490

TITLE: Hypoxia attenuates the p53 response to cellular damage.

AUTHOR(S): Achison, Marcus; Hupp, Ted R. [Reprint Author]

CORPORATE SOURCE: The Cancer Research UK Laboratories, Department of
Molecular and Cellular Pathology, The University of Dundee,
Dundee, DD1 9SY, UK
t.r.hupp@dundee.ac.uk

SOURCE: Oncogene, (29 May 2003) Vol. 22, No. 22, pp. 3431-3440.
print.

ISSN: 0950-9232 (ISSN print).

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 25 Jun 2003

Last Updated on STN: 25 Jun 2003

ABSTRACT: The tumour suppressor activity of p53 in vivo can be subject to pressure from the physiological stress of hypoxia and we report on the development of a cell system to define the p53-dependent stages in the adaptation of cells to hypoxia. p53+/+ cells exposed to hypoxia exhibited a transient arrest in G2/M, but escaped from this checkpoint and entered a long-term G0/G1 arrest. By contrast, isogenic p53-null cells exposed to hypoxic conditions exhibited a 6-10-fold higher level of apoptosis, suggesting that p53 acts as a survival factor under limiting oxygen concentrations. Surprisingly, hypoxia-dependent growth arrest in p53+/+ cells did not result in either p21WAF1 or HIF-1 protein stabilization, but rather promoted a significant decrease in Ser392-site phosphorylation at the CK2/FACT site. However, chemically induced anoxia induced Ser392-site phosphorylation as well as stabilization of both p53 and HIF-1 proteins. In contrast to hypoxia, 5-fluorouracil (5-FU)-induced p53-dependent cell death correlated with enhanced Ser392 phosphorylation of p53 and elevated p21WAF1 protein levels. Hypoxia inhibited 5-FU-induced p53-dependent cell death and attenuated p53 phosphorylation at the ATM and CK2/FACT phosphorylation sites. Although anoxia activates the p53 response, hypoxia silences the p53 transactivation pathway

Serial Number: 10/580,507

and identifies a physiological signalling model to study mechanisms of p53 inactivation under hypoxic conditions.

CONCEPT CODE: Cytology - General 02502
Biochemistry studies - General 10060
Biochemistry studies - Nucleic acids, purines and pyrimidines 10062
Biochemistry studies - Proteins, peptides and amino acids 10064
Pathology - Therapy 12512
Neoplasms - Pathology, clinical aspects and systemic effects 24004
Neoplasms - Therapeutic agents and therapy 24008

INDEX TERMS: Major Concepts
Biochemistry and Molecular Biophysics; Cell Biology; Tumor Biology

INDEX TERMS: Diseases
cancer: neoplastic disease
Neoplasms (MeSH)

INDEX TERMS: Chemicals & Biochemicals
5-fluorouracil: antineoplastic-drug; CK2; FACT; HIF-1 [hypoxia-inducible factor-1]; p21-WAF1; p53: tumor suppressor

INDEX TERMS: Miscellaneous Descriptors
apoptosis; cellular damage; hypoxia; p53 response: attenuation

REGISTRY NUMBER: 51-21-8 (5-fluorouracil)

L615 ANSWER 32 OF 52 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN

ACCESSION NUMBER: 2004:76126 BIOSIS Full-text
DOCUMENT NUMBER: PREV200400077906
TITLE: Potent killing of paclitaxel- and doxorubicin-resistant breast cancer cells by calphostin C accompanied by cytoplasmic vacuolization.

AUTHOR(S): Guo, Baoqing; Hembruff, Stacey L.; Villeneuve, David J.; Kirwan, Angie F.; Parissenti, Amadeo M. [Reprint Author]

CORPORATE SOURCE: Office of the Chair in Cancer Research, Northeastern Ontario Regional Cancer Centre, 41 Ramsey Lake Road, Sudbury, Ont., P3E 5J1, Canada
aparissenti@neorcc.on.ca

SOURCE: Breast Cancer Research and Treatment, (November 2003) Vol. 82, No. 2, pp. 125-141. print.
ISSN: 0167-6806 (ISSN print).

DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 4 Feb 2004
Last Updated on STN: 4 Feb 2004

ABSTRACT: Drug resistance is a major impediment to the successful treatment of breast cancer using chemotherapy. The photoactivatable drug calphostin C has shown promise in killing select drug-resistant tumor cells lines in vitro. To assess the effectiveness of this agent in killing doxorubicin- or paclitaxel-resistant breast tumor cells and to explore its mode of action, MCF-7 cells were exposed to increasing concentrations of either doxorubicin or paclitaxel until maximum resistance was obtained. This resulted in the creation of isogenic drug-resistant MCF-7TAX and MCF-7DOX cell lines, which were approximately 50- and 65-fold resistant to paclitaxel and doxorubicin, respectively. Interestingly, calphostin C was able to kill MCF-7TAX cells as efficiently as wildtype MCF-7 cells (IC50s were 9.2 and 13.2 nM, respectively), while MCF-7DOX cells required a 5-fold higher concentration of calphostin C to achieve the same killing (IC50 = 64.2 nM). Consistent with

Serial Number: 10/580,507

their known mechanisms of action. paclitaxel killed tumor cells by inducing mitotic arrest and cell multinucleation, while doxorubicin induced plasma membrane blebbing and decreased nuclear staining with propidium iodide. In contrast, cytoplasmic vacuolization accompanied cell killing by calphostin C in these cell lines, without the induction of caspase-3 or PARP cleavage or the release of cytochrome c from mitochondria. Calphostin C had little effect on the uptake of either paclitaxel or doxorubicin by the cells. Taken together, the above data suggests that calphostin C is able to potently kill drug-resistant breast tumor cells through a mechanism that may involve the induction of cytoplasmic vacuolization, without activation of typical apoptotic pathways. Consequently, calphostin C may prove useful clinically to combat tumor growth in breast cancer patients whose tumors have become unresponsive to anthracyclines or taxanes, particularly in association with photodynamic therapy.

CONCEPT CODE: Biochemistry studies - General 10060
Pathology - Therapy 12512
Reproductive system - Physiology and biochemistry 16504
Reproductive system - Pathology 16506
Pharmacology - General 22002
Pharmacology - Clinical pharmacology 22005
Neoplasms - Pathology, clinical aspects and systemic effects 24004
Neoplasms - Therapeutic agents and therapy 24008

INDEX TERMS: Major Concepts
Pharmacology; Reproductive System (Reproduction); Tumor Biology

INDEX TERMS: Diseases
breast cancer: neoplastic disease, reproductive system disease/female
Breast Neoplasms (MeSH)

INDEX TERMS: Chemicals & Biochemicals
calphostin C: antineoplastic-drug, pharmacodynamics;
doxorubicin: antineoplastic-drug; paclitaxel: antineoplastic-drug

INDEX TERMS: Miscellaneous Descriptors
cell apoptosis; cytoplasmic vacuolization

ORGANISM: Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
MCF-7 cell line (cell line): human breast cancer cells
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates, Vertebrates

REGISTRY NUMBER: 121263-19-2 (calphostin C)
23214-92-8 (doxorubicin)
33069-62-4 (paclitaxel)

L615 ANSWER 33 OF 52 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN

ACCESSION NUMBER: 2002:470393 BIOSIS Full-text

DOCUMENT NUMBER: PREV200200470393

TITLE: ErbB2 overexpression in an ovarian cancer cell line confers sensitivity to the HSP90 inhibitor geldanamycin.

AUTHOR(S): Smith, Vicki; Hobbs, Stephen; Court, William; Eccles, Suzanne; Workman, Paul; Kelland, Lloyd R. [Reprint author]

CORPORATE SOURCE: CRC Center for Cancer Therapeutics, The Institute of Cancer Research, 15 Cotswold Road, Sutton, SM2 5NG, UK
lloyd@antisoma.com

Serial Number: 10/580,507

SOURCE: Anticancer Research, (July-August, 2002) Vol. 22, No. 4,
pp. 1993-2000. print.
CODEN: ANTRD4. ISSN: 0250-7005.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 4 Sep 2002

Last Updated on STN: 4 Sep 2002

ABSTRACT: ErbB2 is overexpressed in 25-30% of breast and ovarian
cancers, correlates with poor prognosis and lower survival and has also
been associated with chemoresistance. We have established an isogenic
pair of human ovarian cells that differ only in the expression of
erbB2 protein in order to elucidate the role of the protein in determining
cellular sensitivity to various drugs and agents. These included
cisplatin and paclitaxel, the main drugs used in the
treatment of ovarian cancer, and also various signal transduction inhibitors
affecting the ras and PI3K pathways. Transfection of erbB2 resulted in cells
stably overexpressing the protein and showing increased motility compared to
the empty vector control cells. In cells overexpressing erbB2, the most
notable effect on chemosensitivity was that of significantly increased (5-fold)
sensitivity to the heat shock protein 90 (HSP90) molecular chaperone inhibitor
geldanamycin. In contrast, erbB2-overexpressing cells showed statistically
significant resistance to cisplatin, the PI3K inhibitor LY294002 and
the tyrosine kinase inhibitor emodin. No significant difference in growth
inhibition was observed after exposure to paclitaxel, two additional
HSP90 inhibitors radicicol and 17AAG, the cyclin-dependent kinase inhibitor
flavopiridol, the epidermal growth factor receptor (EGFR) tyrosine kinase
inhibitor PD153035, the mek inhibitor U0126 or the farnesyl transferase
inhibitor R115777. Exposure of cells to geldanamycin, 17AAG, emodin, LY294002
and cisplatin led to depletion of erbB2 in the transfected cells.
These data suggest that erbB2 status in ovarian cancer may contribute to
chemosensitivity, in some cases leading to increased sensitivity (as with
geldanamycin) but in other cases leading to resistance (as with
cisplatin).

CONCEPT CODE: Cytology - Animal 02506
Cytology - Human 02508
Pathology - Therapy 12512
Pharmacology - General 22002
Pharmacology - Clinical pharmacology 22005
Neoplasms - Pathology, clinical aspects and systemic
effects 24004
Neoplasms - Therapeutic agents and therapy 24008

INDEX TERMS: Major Concepts
Pharmacology; Tumor Biology

INDEX TERMS: Chemicals & Biochemicals
ErbB-2 protein: tumor cell drug sensitivity role, tumor
cell overexpression; geldanamycin:
antineoplastic-drug, heat shock protein 90
inhibitor, tumor cell sensitivity

ORGANISM: Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
CH1-373 cell line: drug treatment, human ovarian cancer
cell line, in-vitro model system
SKOV3 cell line: drug treatment, human ovarian cancer
cell line, in-vitro model system
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates,
Vertebrates

Serial Number: 10/580,507

ORGANISM: Classifier
Muridae 86375
Super Taxa
Rodentia; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
CH1 cell line: drug treatment, human ovarian cancer cell
line, in-vitro model system
Taxa Notes
Animals, Chordates, Mammals, Nonhuman Vertebrates,
Nonhuman Mammals, Rodents, Vertebrates
REGISTRY NUMBER: 30562-34-6 (geldanamycin)

L615 ANSWER 34 OF 52 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on
STN

ACCESSION NUMBER: 2002:170374 BIOSIS Full-text

DOCUMENT NUMBER: PREV200200170374

TITLE: Overexpression of BclXL in a human ovarian
carcinoma cell line: Paradoxical effects on chemosensitivity
in vitro versus in vivo.

AUTHOR(S): Rogers, Paul M.; Beale, Philip J.; Al-Moundhri, Mansour;
Boxall, Frances; Patterson, Lisa; Valenti, Melanie;
Raynaud, Florence; Hobbs, Steve; Johnston, Stephen;
Kelland, Lloyd R. [Reprint author]

CORPORATE SOURCE: CRC Centre for Cancer Therapeutics, Institute of Cancer
Res, 15 Cotswold Road, Sutton, Surrey, SM2 5NG, UK
lloyd@icr.ac.uk

SOURCE: International Journal of Cancer, (20 February, 2002) Vol.
97, No. 6, pp. 858-863. print.
CODEN: IJCNAW. ISSN: 0020-7136.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 5 Mar 2002

Last Updated on STN: 5 Mar 2002

ABSTRACT: The effect of overexpressing the antiapoptotic protein BclXL in a human ovarian carcinoma cell line has been investigated in terms of sensitivity to the 2 major drugs used to treat this disease, paclitaxel and cisplatin. Stable transfection of BclXL into CH1 cells, which are relatively sensitive to cisplatin, resulted in around 2.7-fold higher expression in comparison with empty vector controls. However, this level of overexpression did not result in significant resistance in vitro to paclitaxel or cisplatin at the 50% inhibition level, using either short-term (4-day) growth inhibition or longer term colony-forming assays. By contrast, parallel subcutaneous xenograft models of these isogenic ovarian carcinoma cells in vivo, differing only in BclXL status, showed that this low-level BclXL ***overexpression*** conferred significant resistance to both paclitaxel and cisplatin in comparison with parent, nontransfected tumours. Whereas parent non-BclXL transfected tumours were highly responsive, with the disappearance of tumours for at least 50 days post treatment, tumours overexpressing BclXL grew back after 30 and 20 days after treatment with paclitaxel and cisplatin, respectively. These differences in responsiveness to paclitaxel in vivo were not attributable to any significant changes in the delivery of drug to the tumour. These data suggest that the responsiveness of ovarian cancer to paclitaxel and cisplatin in vivo, and therefore perhaps clinically, is influenced by levels of the antiapoptotic protein BclXL. Such effects may be missed in vitro when using short-term growth inhibition or clonogenic assays.

CONCEPT CODE: Cytology - Animal 02506
Cytology - Human 02508
Biochemistry studies - General 10060
Pathology - Therapy 12512
Reproductive system - Physiology and biochemistry 16504

Serial Number: 10/580,507

Reproductive system - Pathology 16506
Pharmacology - General 22002
Pharmacology - Clinical pharmacology 22005
Neoplasms - Pathology, clinical aspects and systemic effects 24004
Neoplasms - Therapeutic agents and therapy 24008

INDEX TERMS: Major Concepts
Pharmacology; Reproductive System (Reproduction); Tumor Biology

INDEX TERMS: Diseases
ovarian cancer: neoplastic disease, reproductive system disease/female
Ovarian Neoplasms (MeSH)

INDEX TERMS: Chemicals & Biochemicals
Bcl-XL: overexpression; JM216:
antineoplastic-drug; ZD0473: antineoplastic-drug;
cisplatin: antineoplastic-drug; paclitaxel:
antineoplastic-drug

INDEX TERMS: Miscellaneous Descriptors
drug resistance

ORGANISM: Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
CHI cell line: human ovarian carcinoma cell line
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates, Vertebrates

ORGANISM: Classifier
Muridae 86375
Super Taxa
Rodentia; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
mouse: nude
Taxa Notes
Animals, Chordates, Mammals, Nonhuman Vertebrates, Nonhuman Mammals, Rodents, Vertebrates

REGISTRY NUMBER: 129580-63-8 (JM216)
181630-15-9 (ZD0473)
15663-27-1 (cisplatin)
33069-62-4 (paclitaxel)

L615 ANSWER 35 OF 52 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN

ACCESSION NUMBER: 2002:138329 BIOSIS Full-text

DOCUMENT NUMBER: PREV200200138329

TITLE: Nonpeptidomimetic farnesyltransferase inhibitor RPR-115135 increases cytotoxicity of 5-fluorouracil: Role of p53.

AUTHOR(S): Russo, Patrizia [Reprint author]; Ottoboni, Cristina; Malacarne, Davide; Crippa, Alessandra; Riou, Jean-Francois; O'Connor, Patrick M.

CORPORATE SOURCE: Molecular Pathology Section, Laboratory of Experimental Oncology, National Institute for Research on Cancer, Largo Rosanna Benzi 10, I-16132, Genova, Italy
patrizia.russo@istge.it

SOURCE: Journal of Pharmacology and Experimental Therapeutics, (January, 2002) Vol. 300, No. 1, pp. 220-226. print.
CODEN: JPETAB. ISSN: 0022-3565.

DOCUMENT TYPE: Article

Serial Number: 10/580,507

LANGUAGE: English

ENTRY DATE: Entered STN: 6 Feb 2002

Last Updated on STN: 26 Feb 2002

ABSTRACT: A new nonpeptidic farnesyltransferase inhibitor, RPR-115135, in combination with 5-fluorouracil (5-FU) was studied in an isogenic ***cell*** line model system consisting of human colon cancer HCT-116 cells. HCT-116 cells were transfected with an empty control pCMV vector and with a dominant-negative mutated p53 transgene (248R/W). We found that, relative to control transfectants, there was a slight tendency for the p53 inactivated cells to be less sensitive to 5-FU after 6 days of continuous treatment. Simultaneous administration of RPR-115135 and 5-FU, at equitoxic concentrations, resulted in an enhancement of 5-FU cytotoxicity, especially in the CMV-2 clone. Growth inhibition could be accounted for on the basis of a specific cell cycle arrest phenotype (G2-M arrest in CMV-2 and S arrest in mutated clones), as assayed by flow cytometry. The combination RPR-115135+5-FU increases apoptotic events only in the CMV-2 ***clone***.

CONCEPT CODE: Cytology - Human 02508
Biochemistry studies - Nucleic acids, purines and pyrimidines 10062
Biochemistry studies - Proteins, peptides and amino acids 10064
Pathology - Therapy 12512
Pharmacology - General 22002
Pharmacology - Clinical pharmacology 22005
Neoplasms - Pathology, clinical aspects and systemic effects 24004
Neoplasms - Therapeutic agents and therapy 24008

INDEX TERMS: Major Concepts
Pharmacology; Tumor Biology

INDEX TERMS: Chemicals & Biochemicals
5-fluorouracil: antineoplastic-drug, cytotoxicity;
RPR-115135: enzyme inhibitor-drug, nonpeptidomimetic farnesyltransferase inhibitor; p53

INDEX TERMS: Miscellaneous Descriptors
signal transduction

ORGANISM: Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
HCT-116 cell line: human colon cancer cells
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates, Vertebrates

REGISTRY NUMBER: 51-21-8 (5-fluorouracil)
191989-28-3 (RPR-115135)

L615 ANSWER 36 OF 52 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN

ACCESSION NUMBER: 2002:286499 BIOSIS Full-text

DOCUMENT NUMBER: PREV200200286499

TITLE: Expression of different mutant p53 transgenes in neuroblastoma cells leads to different cellular responses to genotoxic agents.

AUTHOR(S): Gangopadhyay, Suman; Jalali, Farid; Reda, Danny; Peacock, Jim; Bristow, Robert G.; Benchimol, Samuel [Reprint author]

CORPORATE SOURCE: Ontario Cancer Institute, 610 University Avenue, Toronto, Ontario, M5G 2M9, Canada
benchimo@uhnres.utoronto.ca

Serial Number: 10/580,507

SOURCE: Experimental Cell Research, (April 15, 2002) Vol. 275, No. 1, pp. 122-131. print.
CODEN: ECREAL. ISSN: 0014-4827.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 8 May 2002

Last Updated on STN: 8 May 2002

ABSTRACT: The involvement of p53 as a determinant of chemosensitivity or radiosensitivity is not well understood and is complicated by numerous contradictory reports. Here we have addressed this issue using a series of ***isogenic*** clones derived from two neuroblastoma cell lines that express wild-type p53 genes, Nub7 and IMR32. Two different mutant p53 transgenes were used in an attempt to disrupt p53 function in the ***clones.*** Our findings indicate that the cellular response is dependent on the genotoxic agent used as well as on the specific p53 transgene used. Cellular radiosensitivity showed no association with apoptosis or with the ability of the cells to arrest in G1 after irradiation. An association was observed, however, between gamma-radiation sensitivity and DNA double-strand break rejoining activity.

CONCEPT CODE: Cytology - General 02502
Cytology - Animal 02506
Genetics - General 03502
Genetics - Animal 03506
Biochemistry studies - General 10060
Nervous system - Pathology 20506
Neoplasms - Pathology, clinical aspects and systemic effects 24004

INDEX TERMS: Major Concepts
Cell Biology; Molecular Genetics (Biochemistry and Molecular Biophysics); Tumor Biology

INDEX TERMS: Diseases
neuroblastoma: neoplastic disease, nervous system disease
Neuroblastoma (MeSH)

INDEX TERMS: Chemicals & Biochemicals
cisplatin: cytotoxic agent; etoposide: cytotoxic agent

INDEX TERMS: Methods & Equipment
UV-irradiation: radiologic method; gamma-irradiation: radiologic method

INDEX TERMS: Miscellaneous Descriptors
DNA damage; DNA double-stranded break; DNA repair

ORGANISM: Classifier
Animalia 33000
Super Taxa
Animalia
Organism Name
IMR32 cell line: neuroblastoma cells
Nub7 cell line: neuroblastoma cells
Taxa Notes
Animals

REGISTRY NUMBER: 15663-27-1 (cisplatin)
33419-42-0 (etoposide)

GENE NAME: mouse p53 gene (Muridae): mutant

L615 ANSWER 37 OF 52 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN

ACCESSION NUMBER: 2001:245586 BIOSIS Full-text

DOCUMENT NUMBER: PREV200100245586

TITLE: DNA damage induces p53-dependent down-regulation of hCHK1.

AUTHOR(S): Damia, Giovanna [Reprint author]; Sanchez, Yolanda; Erba,

Serial Number: 10/580,507

CORPORATE SOURCE: Eugenio; Brogginì, Massimo
Molecular Pharmacology Unit, Department of Oncology,
Istituto di Ricerche Farmacologiche "Mario Negri", Via
Eritrea 62, 20157, Milan, Italy
damia@irfmm.mnegri.it

SOURCE: Journal of Biological Chemistry, (April 6, 2001) Vol. 276,
No. 14, pp. 10641-10645. print.
CODEN: JBCHA3. ISSN: 0021-9258.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 23 May 2001
Last Updated on STN: 19 Feb 2002

ABSTRACT: The levels of the human checkpoint gene hCHK1 were measured in human cancer cells growing in vitro after treatment with the DNA damaging agent cis-dichlorodiammine platinum(II) (DDP). Treatment of human cancer cell lines with DDP induced a decrease in the hCHK1 protein levels starting 6 h after treatment, with a further decline at 24 and 48 h. A similar decrease in the levels of hCHK1 was found at the mRNA level by using Northern blot analysis. By using isogenic cell systems in which p53 was disrupted either by transfection with HPV-E6 or by targeted homologous recombination, we found that the DNA damage-induced down-regulation of hCHK1 was only observable in wild type p53-expressing cells, with only a minor decline in the hCHK1 levels observable 48 h after treatment in cells with disrupted p53. Similarly, treatment of mutant p53-expressing human cancer cell lines with DDP did not result in changes in the levels of hCHK1. The p53-dependent down-regulation of hCHK1 is likely to be at transcriptional levels, as suggested by the lack of down-regulation of the hCHK1 when transfected under the control of a heterologous viral promoter. In addition, p53 is able to down-regulate the luciferase activity under the control of the 5' flanking region of the hCHK1 gene. The data suggest a strict link between p53 and hCHK1 governing the activation and repression of the G2 checkpoint in which both proteins participate.

CONCEPT CODE: Biochemistry studies - Nucleic acids, purines and pyrimidines 10062
Cytology - Human 02508
Genetics - General 03502
Genetics - Human 03508
Biochemistry studies - Proteins, peptides and amino acids 10064
Neoplasms - Pathology, clinical aspects and systemic effects 24004

INDEX TERMS: Major Concepts
Molecular Genetics (Biochemistry and Molecular Biophysics); Methods and Techniques

INDEX TERMS: Diseases
cancer: neoplastic disease
Neoplasms (MeSH)

INDEX TERMS: Chemicals & Biochemicals
DNA: damage; cis-dichlorodiammine platinum II: chelating agent; mRNA [messenger RNA]; p53

INDEX TERMS: Methods & Equipment
Northern blot: Recombinant DNA Technology, detection method, detection/labeling techniques, gene mapping, molecular probe techniques; Western blot: detection method, detection/labeling techniques, gene mapping; luciferase assay: activity assays, analytical method

INDEX TERMS: Miscellaneous Descriptors
gene expression; homologous recombination

ORGANISM: Classifier
Hominidae 86215

Serial Number: 10/580,507

Super Taxa

Primates; Mammalia; Vertebrata; Chordata; Animalia

Organism Name

HCT-116 cell line

Taxa Notes

Animals, Chordates, Humans, Mammals, Primates,
Vertebrates

REGISTRY NUMBER: 15663-27-1 (cis-dichlorodiammine platinum II)

GENE NAME: human checkpoint 1 gene (Hominidae): downregulation

L615 ANSWER 38 OF 52 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on
STN

ACCESSION NUMBER: 2000:418673 BIOSIS Full-text

DOCUMENT NUMBER: PREV200000418673

TITLE: The breast cancer susceptibility gene
BRCA1 is required for subnuclear assembly of Rad51 and
survival following treatment with the DNA cross-linking
agent cisplatin.

AUTHOR(S): Bhattacharyya, Anamitra; Ear, Uy S.; Koller, Beverly H.;
Weichselbaum, Ralph R.; Bishop, Douglas K. [Reprint author]

CORPORATE SOURCE: University of Chicago Medical Center, 5841 S. Maryland
Ave., Room O-055, MC1105, Chicago, IL, 60637, USA

SOURCE: Journal of Biological Chemistry, (August 4, 2000) Vol. 275,
No. 31, pp. 23899-23903. print.
CODEN: JBCHA3. ISSN: 0021-9258.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 4 Oct 2000

Last Updated on STN: 8 Jan 2002

ABSTRACT: Mutations in breast cancer tumor

susceptibility genes, BRCA1 and BRCA2, predispose women to early onset

breast cancer and other malignancies. The Brca genes are
involved in multiple cellular processes in response to DNA damage including
checkpoint activation, gene transcription, and DNA repair. Biochemical
interaction with the recombinational repair protein Rad51 (Scully, R., Chen,
J., Ochs, R. L., Keegan, K., Hoekstra, M., Feunteun, J., and Livingston, D.
M. (1997) Cell 90, 425-435), as well as genetic evidence (Moynahan, M. E.,
Chiu, J. W., Koller, B. H., and Jasin, M. (1999) Mol. Cell 4, 511-518 and
Snouwaert, J.N., Gowen, L. C., Latour, A. M., Mohn, A. R., Xiao, A.,
DiBiase, L., and Koller, B. H. (1999) Oncogene 18, 7900-7907), demonstrates
that Brcal is involved in recombinational repair of DNA double strand breaks.
Using isogenic Brcal+/+ and brcal-/- mouse embryonic stem (ES)

cell lines, we investigated the role of Brcal in the cellular response
to two different categories of DNA damage: x-ray induced damage and
cross-linking damage caused by the chemotherapeutic agent, cisplatin.
Immunofluorescence studies with normal and brcal-/- mutant mouse ES cell lines
indicate that Brcal promotes assembly of subnuclear Rad51 foci following both
types of DNA damage. These foci are likely to be oligomeric complexes of Rad51
engaged in repair of DNA lesions or in processes that allow cells to tolerate
such lesions during DNA replication. Clonogenic assays show that brcal-/-
mutants are 5-fold more sensitive to cisplatin compared with wild-type cells.
Our studies suggest that Brcal contributes to damage repair and/or tolerance by
promoting assembly of Rad51. This function appears to be shared with Brca2.

CONCEPT CODE: Biochemistry studies - General 10060

Cytology - Animal 02506

Genetics - General 03502

Genetics - Animal 03506

Biochemistry studies - Nucleic acids, purines and
pyrimidines 10062

Pathology - Therapy 12512

Serial Number: 10/580,507

Reproductive system - Pathology 16506
Neoplasms - Pathology, clinical aspects and systemic effects 24004
Neoplasms - Therapeutic agents and therapy 24008
Development and Embryology - General and descriptive 25502

INDEX TERMS: Major Concepts
Molecular Genetics (Biochemistry and Molecular Biophysics); Methods and Techniques; Tumor Biology
INDEX TERMS: Parts, Structures, & Systems of Organisms
embryonic stem cells: embryonic structure
INDEX TERMS: Diseases
breast cancer: neoplastic disease,
reproductive system disease/female
Breast Neoplasms (MeSH)
INDEX TERMS: Chemicals & Biochemicals
DNA; Rad51; cisplatin: antineoplastic
-drug, DNA cross-linking agent; mouse BRCA1 gene; mouse
BRCA2 gene
INDEX TERMS: Methods & Equipment
immunofluorescence: detection method, fluorescence
detection
ORGANISM: Classifier
Muridae 86375
Super Taxa
Rodentia; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
mouse
Taxa Notes
Animals, Chordates, Mammals, Nonhuman Vertebrates,
Nonhuman Mammals, Rodents, Vertebrates
REGISTRY NUMBER: 15663-27-1 (cisplatin)

L615 ANSWER 39 OF 52 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on
STN

ACCESSION NUMBER: 2001:70926 BIOSIS Full-text
DOCUMENT NUMBER: PREV200100070926
TITLE: Resistance of mutant BRCA1 breast cancer cells to
paclitaxel-induced apoptosis mediated by Bcl-2.
AUTHOR(S): Turner, B. C. [Reprint author]; Ren, Q. [Reprint author];
Gupta, P. K.; Basu, A.; Krajewski, S.; Krajewska, M.;
Potoczek, M. [Reprint author]; Carbone, C. J. [Reprint
author]; Reed, J. C.; Halder, S.
CORPORATE SOURCE: Radiation Oncology, Thomas Jefferson University Hospital,
Philadelphia, PA, USA
SOURCE: Breast Cancer Research and Treatment, (November, 2000) Vol.
64, No. 1, pp. 28. print.
Meeting Info.: 23rd Annual San Antonio Breast Cancer
Symposium. San Antonio, Texas, USA. December 06-09, 2000.
Cancer Therapy and Research Center Research Foundation.
CODEN: BCTRD6. ISSN: 0167-6806.
DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LANGUAGE: English
ENTRY DATE: Entered STN: 7 Feb 2001
Last Updated on STN: 12 Feb 2002
CONCEPT CODE: Genetics - General 03502
General biology - Symposia, transactions and proceedings
00520
Cytology - Animal 02506

Serial Number: 10/580,507

Cytology - Human 02508
Genetics - Human 03508
Biochemistry studies - General 10060
Biochemistry studies - Nucleic acids, purines and
pyrimidines 10062
Biochemistry studies - Proteins, peptides and amino acids
10064
Pathology - Therapy 12512
Reproductive system - Physiology and biochemistry 16504
Reproductive system - Pathology 16506
Pharmacology - General 22002
Pharmacology - Clinical pharmacology 22005
Neoplasms - Pathology, clinical aspects and systemic
effects 24004
Neoplasms - Therapeutic agents and therapy 24008

INDEX TERMS:

Major Concepts
Molecular Genetics (Biochemistry and Molecular
Biophysics); Pharmacology; Reproductive System
(Reproduction); Tumor Biology

INDEX TERMS:

Parts, Structures, & Systems of Organisms
breast: reproductive system; breast cancer cell:
reproductive system; isogenic cell;
microtubule

INDEX TERMS:

Diseases
apoptosis: disease-miscellaneous, drug-induced

INDEX TERMS:

Diseases
breast cancer: neoplastic disease, reproductive system
disease/female
Breast Neoplasms (MeSH)

INDEX TERMS:

Chemicals & Biochemicals
Bcl-2 protein: activation, expression, mutation,
phosphorylation; DNA; adriamycin; cisplatinum;
paclitaxel: antineoplastic-drug, dose

INDEX TERMS:

Methods & Equipment
DAPI assay [4', 6'-diamidino-2-phenylindole assay]:
bioassay method; DNA comet assay: bioassay method,
genetic method; clonogenic assay: bioassay method

INDEX TERMS:

Miscellaneous Descriptors
DNA damage; DNA synthesis; cellular proliferation;
cellular survival: determination; ionizing radiation;
protein pathway: activation; Meeting Abstract

ORGANISM:

Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
HCC1937 cell line: human breast cancer cells, wild-type
BRCA1 expression vector transfection
human: patient

Taxa Notes
Animals, Chordates, Humans, Mammals, Primates,
Vertebrates

REGISTRY NUMBER:

25316-40-9 (adriamycin)
15663-27-1 (cisplatinum)
33069-62-4 (paclitaxel)

GENE NAME:

BRCA1 gene (Hominidae): homozygous mutation, resistance,
wild-type

Serial Number: 10/580,507

ACCESSION NUMBER: 1999:336894 BIOSIS Full-text
DOCUMENT NUMBER: PREV199900336894
TITLE: Myeloma cells selected for resistance to CD95-mediated apoptosis are not cross-resistant to cytotoxic drugs: Evidence for independent mechanisms of caspase activation.
AUTHOR(S): Landowski, Terry H.; Shain, Kenneth H.; Oshiro, Marc M.; Buyuksal, Ibrahim; Painter, Jeffrey S.; Dalton, William S. [Reprint author]
CORPORATE SOURCE: Clinical Investigations Program, H. Lee Moffitt Cancer Center and Research Institute, University of South Florida, 12902 Magnolia Dr, Tampa, FL, 33612, USA
SOURCE: Blood, (July 1, 1999) Vol. 94, No. 1, pp. 265-274. print. CODEN: BLOOAW. ISSN: 0006-4971.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 24 Aug 1999
Last Updated on STN: 24 Aug 1999

ABSTRACT: We have previously shown that selection for resistance to the anthracenes, doxorubicin or mitoxantrone, results in coselection for resistance to CD95-mediated apoptosis (Landowski et al: Blood 89:1854, 1997). In the present study, we were interested in determining if the converse is also true; that is, does selection for CD95 resistance coselect for resistance to chemotherapeutic drugs. To address this question, we used two isogenic models of CD95-resistant versus CD95-sensitive cell lines: 8226/S myeloma cells selected for resistance to CD95-mediated apoptosis; and K562 cells expressing ectopic CD95. Repeated exposure of the CD95-sensitive human myeloma cell line, 8226/S, to agonistic anti-CD95 antibody resulted in a cell line devoid of CD95 receptor surface expression and completely resistant to CD95-mediated apoptosis. Multiple clonal populations derived from the CD95-resistant cell line showed no difference in sensitivity to doxorubicin, mitoxantrone, Ara-C, or etoposide, demonstrating that cross-resistance between Fas-mediated apoptosis and drug-induced apoptosis occurs only when cytotoxic drugs are used as the selecting agent. Using the inverse approach, we transfected the CD95-negative cell line, K562, with a CD95 expression vector. Clones expressing variable levels of cell-surface CD95 were isolated by limiting dilution, and analyzed for sensitivity to CD95-mediated apoptosis and response to chemotherapeutic drugs. We show that CD95 surface expression confers sensitivity to CD95-mediated apoptosis; however, it does not alter response to chemotherapeutic drugs. Similarly, doxorubicin-induced activation of caspases 3 and 8 was identical in the CD95-sensitive and CD95-resistant cell lines in both isogenic cell systems. In addition, prior treatment with the CD95 receptor-blocking antibody, ZB4, inhibited CD95-activated apoptosis in 8226/S cells, but had no effect on doxorubicin cytotoxicity. These results show that CD95 and chemotherapeutic drugs use common apoptotic effectors, but the point of convergence in these two pathways is downstream of CD95 receptor/ligand interaction.

CONCEPT CODE: Neoplasms - Therapeutic agents and therapy 24008
Enzymes - Physiological studies 10808
Metabolism - Proteins, peptides and amino acids 13012
Blood - Blood cell studies 15004
Blood - Lymphatic tissue and reticuloendothelial system 15008
Neoplasms - Biochemistry 24006
Neoplasms - Neoplastic cell lines 24005
Pharmacology - Blood and hematopoietic agents 22008
Blood - Blood, lymphatic and reticuloendothelial pathologies 15006
Neoplasms - Blood and reticuloendothelial neoplasms 24010
Cytology - Human 02508
Pharmacology - Drug metabolism and metabolic stimulators

Serial Number: 10/580,507

22003

Biochemistry studies - General 10060

Tissue culture, apparatus, methods and media 32500

Pathology - Necrosis 12510

Pathology - Therapy 12512

Biochemistry studies - Nucleic acids, purines and pyrimidines 10062

Biochemistry studies - Proteins, peptides and amino acids 10064

INDEX TERMS: Major Concepts

Pharmacology; Tumor Biology

INDEX TERMS: Chemicals & Biochemicals

cytosine arabinoside: antineoplastic-drug; doxorubicin:

antineoplastic-drug; etoposide: antineoplastic-drug;

mitoxantrone: antineoplastic-drug

ORGANISM: Classifier

Hominidae 86215

Super Taxa

Primates; Mammalia; Vertebrata; Chordata; Animalia

Organism Name

8226 cell line: CD95 ligand-mediated apoptosis

resistance selection, human multiple myeloma cell line,

negative cytotoxic drug cross resistance, independent

caspase activation mechanisms

Taxa Notes

Animals, Chordates, Humans, Mammals, Primates,

Vertebrates

REGISTRY NUMBER: 147-94-4 (cytosine arabinoside)

23214-92-8 (doxorubicin)

33419-42-0 (etoposide)

65271-80-9 (mitoxantrone)

81271-93-4 (CD95)

186322-81-6 (CASPASE)

L615 ANSWER 41 OF 52 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN

ACCESSION NUMBER: 1998:484925 BIOSIS Full-text

DOCUMENT NUMBER: PREV199800484925

TITLE: Induction of p53-dependent and p53-independent cellular responses by topoisomerase 1 inhibitors.

AUTHOR(S): McDonald, A. C.; Brown, R. [Reprint author]

CORPORATE SOURCE: CRC Department of Medical Oncology, CRC Beatson Laboratories, Gartnavel Estate, Switchback Road, Glasgow G61 1BD, UK

SOURCE: British Journal of Cancer, (Sept., 1998) Vol. 78, No. 6, pp. 745-751. print.

CODEN: BJCAAI. ISSN: 0007-0920.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 5 Nov 1998

Last Updated on STN: 5 Nov 1998

ABSTRACT: We have previously shown that loss of p53 function in A2780 human ovarian adenocarcinoma cells confers increased clonogenic resistance to several DNA-damaging agents, but not to taxol or camptothecin. We have now extended these studies, comparing wild-type p53-expressing A2780 cells with isogenic derivatives transfected with a dominant negative mutant (143; val to ala) p53. We show that, as well as retaining equivalent clonogenic sensitivity to camptothecin, mutant p53 transfectants of A2780 cells do not acquire significantly increased resistance to the camptothecin analogues topotecan and SN-38, the active metabolite of CPT-11. Compared with

Serial Number: 10/580,507

vector-alone transfectants they are, however, relatively (2.2-fold) resistant to GI 147211, a further camptothecin analogue undergoing clinical trial. Treatment of A2780 with camptothecin and each analogue produces an increase, maximal at 24-48 h after drug exposure, of cells in the G2/M phase of the cell cycle and a decrease in both G1 and S-phase cells. The G2 arrest is independent of p53 function for camptothecin and the three analogues. All four compounds can induce apoptosis in A2780, which is reduced in mutant p53 transfectants, as measured using the terminal DNA transferase-mediated b-d UTP nick end labelling (TUNEL) assay. Thus, although p53-dependent apoptosis is induced by camptothecin, topotecan and SN-38 in this human ovarian carcinoma cell line, these drugs induce p53-independent death, as measured by clonogenic assay.

CONCEPT CODE: Pharmacology - General 22002
Cytology - Human 02508
Biochemistry studies - General 10060
Reproductive system - General and methods 16501
Neoplasms - General 24002

INDEX TERMS: Major Concepts
Pharmacology; Tumor Biology

INDEX TERMS: Chemicals & Biochemicals
camptothecin: antineoplastic; p53; topoisomerase 1
inhibitors; topotecan: antineoplastic; SN-38:
antineoplastic

INDEX TERMS: Miscellaneous Descriptors
apoptosis; drug resistance

ORGANISM: Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
A2780: ovarian adenocarcinoma cells
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates,
Vertebrates

REGISTRY NUMBER: 7689-03-4 (camptothecin)
123948-87-8 (topotecan)
18282-10-5Q (SN-38)
86639-52-3Q (SN-38)

L615 ANSWER 42 OF 52 EMBASE COPYRIGHT (c) 2008 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2004134802 EMBASE Full-text

TITLE: Characterization of p53 Wild-Type and Null Isogenic Colorectal Cancer Cell Lines Resistant to 5-Fluorouracil, Oxaliplatin, and Irinotecan

AUTHOR: Boyer, John; McLean, Estelle G.; Aroori, Somaiah; Wilson, Peter; McCulla, Andrea; Longley, Daniel B.; Johnston, Patrick G. (correspondence)

CORPORATE SOURCE: Department of Oncology, Cancer Research Centre, Queen's University Belfast, Lisburn Road, Belfast BT9 7AB, United Kingdom. oncology@qub.ac.uk

AUTHOR: Carey, P. Declan

CORPORATE SOURCE: Department of Surgery, Queen's University Belfast, Belfast, United Kingdom.

SOURCE: Clinical Cancer Research, (15 Mar 2004) Vol. 10, No. 6, pp. 2158-2167.

Serial Number: 10/580,507

Refs: 57

ISSN: 1078-0432 CODEN: CCREF4

COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 016 Cancer

030 Clinical and Experimental Pharmacology
037 Drug Literature Index
048 Gastroenterology

LANGUAGE: English

SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 22 Apr 2004

Last Updated on STN: 22 Apr 2004

ABSTRACT: To elucidate mechanisms of resistance to chemotherapies currently used in the first-line treatment of advanced colorectal cancer, we have developed a panel of HCT116 p53 wild-type (p53(+/+)) and null (p53(-/-))

isogenic colorectal cancer cell lines resistant to the antimetabolite 5-fluorouracil (5-FU), topoisomerase I inhibitor ***irinotecan*** (CPT-11), and DNA-damaging agent oxaliplatin. These cell lines were generated by repeated exposure to stepwise increasing concentrations of each drug over a period of several months. We have demonstrated a significant decrease in sensitivity to 5-FU, CPT-11, and oxaliplatin in each respective resistant cell line relative to the parental line as determined by 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyltetrazolium bromide analysis, with increases in IC(50 (72 h)) concentrations ranging from 3- to 65-fold. Using flow cytometry, we have also demonstrated compromised apoptosis and cell cycle arrest in 5-FU-, oxaliplatin-, and CPT-11-resistant cell lines compared with the parental lines after exposure to each drug. In addition, we found that resistance to 5-FU and oxaliplatin was higher in parental p53(-/-) cells compared with parental p53(+/+) cells, with an .apprx.5-fold increase in IC(50 (72 h)) for each drug. In contrast, the IC(50 (72 h)) doses for CPT-11 were identical in the p53 wild-type and null cell lines. Furthermore, apoptosis after treatment with 5-FU and oxaliplatin, but not CPT-11, was significantly reduced in parental p53(-/-) cells compared with parental p53(+/+) cells. These data suggest that p53 may be an important determinant of sensitivity to 5-FU and oxaliplatin but not CPT-11. Using semiquantitative reverse transcription-PCR, we have demonstrated down-regulation of thymidine phosphorylase mRNA in both p53(+/+) and p53(-/-) 5-FU-resistant cells, suggesting that decreased production of 5-FU active metabolites may be an important resistance mechanism in these lines. In oxaliplatin-resistant cells, we noted increased mRNA levels of the nucleotide excision repair gene ERCC1 and ATP-binding cassette transporter breast cancer resistance protein. In CPT-11-resistant cells, we found reduced mRNA levels of carboxylesterase, the enzyme responsible for converting CPT-11 to its active metabolite SN-38, and topoisomerase I, the SN-***38*** target enzyme. In addition, we noted overexpression of ***breast*** cancer resistance protein in the CPT-11-resistant lines. These cell lines are ideal tools with which to identify novel determinants of drug resistance in both the presence and absence of wild-type p53.

CONTROLLED TERM: Medical Descriptors:
advanced cancer
article
cancer cell culture
*colorectal cancer: DR, drug resistance
*colorectal cancer: DT, drug therapy
concentration response
controlled study
cytotoxicity
down regulation

Serial Number: 10/580,507

drug activity
drug mechanism
drug sensitivity
enzyme mechanism
ERCC1 gene
flow cytometry
gene
human
human cell
IC 50
mitosis
mitosis inhibition
priority journal
reverse transcription polymerase chain reaction
wild type

CONTROLLED TERM:

Drug Descriptors:
3 (4,5 dimethyl 2 thiazolyl) 2,5 diphenyltetrazolium
bromide
7 ethyl 10 hydroxycamptothecin
ABC transporter: EC, endogenous compound
breast cancer resistance protein: EC, endogenous
compound
*fluorouracil: DT, drug therapy
*fluorouracil: PD, pharmacology
*irinotecan: DT, drug therapy
*irinotecan: PD, pharmacology
messenger RNA: EC, endogenous compound
*oxaliplatin: DT, drug therapy
*oxaliplatin: PD, pharmacology
*protein p53: EC, endogenous compound

CAS REGISTRY NO.:

thymidine phosphorylase: EC, endogenous compound
(3 (4,5 dimethyl 2 thiazolyl) 2,5 diphenyltetrazolium
bromide) 298-93-1; (7 ethyl 10 hydroxycamptothecin)
86639-52-3; (fluorouracil) 51-21-8; (
irinotecan) 100286-90-6; (oxaliplatin) 61825-94-3;
(thymidine phosphorylase) 9030-23-3

CHEMICAL NAME:

(1) cpt 11; sn 38

COMPANY NAME:

(1) Pharmacia Upjohn (United States); Sanofi Synthelabo
(United States); Sigma (United States)

L615 ANSWER 43 OF 52 EMBASE COPYRIGHT (c) 2008 Elsevier B.V. All rights
reserved on STN

ACCESSION NUMBER: 1998034477 EMBASE Full-text

TITLE: Methotrexate resistance in human uroepithelial
cells with p53 alterations.

AUTHOR: Reznikoff, Catherine A. (correspondence)

CORPORATE SOURCE: Department of Human Oncology, University of Wisconsin,
Comprehensive Cancer Center, Madison, WI 53792, United
States.

AUTHOR: Yeager, Thomas R.; Reznikoff, Catherine A. (correspondence)

CORPORATE SOURCE: Univ. Wisconsin Compreh. Cancer Ctr., Department of Human
Oncology, Prog. in Cell and Molecular Biology, Madison, WI,
United States.

AUTHOR: Reznikoff, Catherine A. (correspondence)

CORPORATE SOURCE: Department of Human Oncology, Wisconsin Univ. Compreh. Can.
Ctr., Madison, WI 68792, United States.

SOURCE: Journal of Urology, (Feb 1998) Vol. 159, No. 2, pp.
581-585.

Refs: 21

ISSN: 0022-5347 CODEN: JOURAA

Serial Number: 10/580,507

COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 016 Cancer
028 Urology and Nephrology
030 Clinical and Experimental Pharmacology
037 Drug Literature Index

LANGUAGE: English

SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 27 Feb 1998

Last Updated on STN: 27 Feb 1998

ABSTRACT: Purpose: Bladder cancers are frequently treated with combination chemotherapy that includes methotrexate (MTX). The development of drug resistance is a common problem in treatment of bladder cancers. We tested if the status of p53 and/or pRb affects the development of MTX resistance in bladder epithelial cell lines. Materials and Methods: We used two ***isogenic*** sets of cell lines in which we manipulated the status of p53 and/or pRb by transformation with Human Papillomavirus (HPV) E6 and/or E7 or with a transdominant TP53 mutant (TP53(143)). One series of ***isogenic*** origin was derived from normal human uroepithelial ***cells*** (HUC), and the other was derived from a human transitional cell carcinoma (TCC). Cell lines with p53 and/or pRb alterations were cultured for six months while increasing the MTX concentration in each line, as resistance developed. Results: Two cell lines with both pRb and p53 alterations, α E6/E7-HUC and α E7-HUC(p53mu), acquired the greatest resistance (750 nM) to MTX. One line with p53 loss, E6-TCC10, acquired intermediate resistance (500 nM), while two lines, α E7-HUC and E7-TCC10, with altered pRb but wildtype p53, showed low levels of MTX resistance (125 nM and 80 nM, respectively). Two clear mechanisms of MTX resistance were identified. All five MTX resistant cell lines showed altered uptake of MTX. In addition, two of five MTX resistant cell lines, both with altered p53, showed dihydrofolate reductase (DHFR) amplification. Conclusions: p53 alteration increases the risk for development of drug resistance by both DHFR amplification and altered MTX transport in transformed human bladder epithelial cell lines.

CONTROLLED TERM: Medical Descriptors:
article
*bladder cancer: DR, drug resistance
*bladder cancer: DT, drug therapy
cancer cell culture
cancer genetics
*cancer resistance
controlled study
drug uptake
flow cytometry
gene amplification
gene mutation
human
human cell
priority journal
tumor cell: DR, drug resistance
tumor cell: DT, drug therapy
tumor suppressor gene

CONTROLLED TERM: Drug Descriptors:
dihydrofolate reductase: EC, endogenous compound
*methotrexate: DT, drug therapy
protein p16: EC, endogenous compound
*protein p53: EC, endogenous compound
CAS REGISTRY NO.: (dihydrofolate reductase) 9002-03-3; (methotrexate)
15475-56-6, 59-05-2, 7413-34-5

Serial Number: 10/580,507

L615 ANSWER 44 OF 52 WPIX COPYRIGHT 2008 THOMSON REUTERS on STN
ACCESSION NUMBER: 2006-778868 [79] WPIX
DOC. NO. CPI: C2006-241200 [79]
TITLE: Screening antitumor agent, by contacting
aneuploid cells having enhanced dependence on
spindle checkpoint with test compound, observing growth
inhibition of aneuploid cells, to identify
agent that compromises spindle checkpoint
DERWENT CLASS: B04; D16
INVENTOR: DAWSON D
PATENT ASSIGNEE: (DAWS-I) DAWSON D
COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
US 20060223101	A1	20061005	(200679)*	EN	28[4]	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 20060223101	A1 Provisional	US 2005-668444P	20050405
US 20060223101	A1	US 2006-396927	20060403

PRIORITY APPLN. INFO: US 2006-396927 20060403
US 2005-668444P 20050405

INT. PATENT CLASSIF.:

IPC ORIGINAL: C40B0030-06 [I,A]; C40B0030-06 [I,C]
USCLASS NCLM: 435/006.000
NCLS: 435/007.100

BASIC ABSTRACT:

US 20060223101 A1 UPAB: 20061208

NOVELTY - Screening an antitumor agent, by contacting sample of aneuploid strain of cells having enhanced dependence on a spindle checkpoint with a compound, and observing inhibition of growth of the aneuploid cells in comparison to a control sample of the aneuploid cells in the absence of the compound, and in comparison to a euploid strain of cells, where the comparison cells are grown under conditions that are otherwise identical, where identifying the agent that compromises the spindle checkpoint of the aneuploid cells is identifying the antitumor composition.

DETAILED DESCRIPTION - Screening several compounds to identify a compound that is an antitumor agent, involves contacting a sample of an aneuploid strain of cells having enhanced dependence on a spindle checkpoint with the at least one compound, and observing inhibition of growth of the aneuploid cells in comparison to a control sample of the aneuploid cells in the absence of the compound, and in comparison to a euploid strain of cells, where the comparison cells are grown under conditions that are otherwise identical, where identifying the agent that compromises the spindle checkpoint of the aneuploid cells is identifying the antitumor composition.

INDEPENDENT CLAIMS are included for:

(1) identifying a compound from a library of low molecular weight compounds that activates a spindle checkpoint protein, involves contacting a sample of a first and second strain of cells with at least one compound, where cells of the first strain contain a gene encoding the protein and cells of the second strain lack a gene encoding the protein in a functional form, and

Serial Number: 10/580,507

observing arrest of growth of the first strain of cells in comparison to the second strain of cells, and in comparison to a second sample of the first strain of cells absent the compound, the strains grown under conditions that are otherwise identical to, where the compound activates the spindle checkpoint; and

(2) a kit for screening for an antitumor agent, comprising a yeast strain selected from the group of a strain having a deletion and a human replacement gene such as human genes consisting of MAD1, MAD2, MAD3, BUB1, BUBR1, and BUB3, at least one aneuploid strain, and a container and instructions for use with several compounds.

ACTIVITY - Cytostatic.

MECHANISM OF ACTION - Inhibits growth of aneuploid cells. No biological data given.

USE - The method is useful for screening several compounds to identify a compound that is an antitumor agent (claimed). MANUAL CODE: CPI: B04-E02F; B04-E03F; B04-F02; B04-F02A; B04-F09C;

B06-A03; B12-K04E1; B14-H01; D05-H08; D05-H09

TECH

BIOTECHNOLOGY - Preferred Method: In screening method, the strains are yeast strains. The strains carry a deletion of a yeast spindle checkpoint protein and a replacement human gene encoding a spindle checkpoint protein, wherein the human gene complements the yeast deletion. The cells are diploid. The aneuploid cell is a monosomic cell and a tetraploid cell. The yeast is a *Saccharomyces*. Prior to contacting step, the method involves engineering the aneuploid cell to select for monosomy. The monosomic cells have one homolog of a chromosome I, chromosome III, and an exogenously transfected artificial chromosome. The aneuploid strain and the euploid strain are otherwise isogenic. In identifying method, the cells are yeast cells. The cells of the first strain contain a wild-type gene for each of the spindle checkpoint genes. The cells of the second strain contain a deletion in at least one spindle checkpoint gene. The first strain contains the deletion and further contains a replacement gene of human origin that complements function of the gene. The gene with the deletion is MAD3 and the replacement human gene is hBUBR1. The cells of the first and second strains are haploid. The mutation is chosen from deletion in a gene such as MAD1, MAD2, MAD, BUB1, and BUB3. The first strain or the second strain comprises several mutations, or comprises a mixture of cells having different genotypes. The contacting step further comprises the compound at a concentration of at least 5 μ M or 50 μ M. The step of arresting growth is observing an optical density of cells of less than 0.01, 0.05, 0.1 or 0.5. The growth is observed at an optical density of cells of at least about 0.5, 1.0 or 1.5. The method further involves determining a concentration that inhibits 50 % of growth. The method further involves removing the compound and observing a resumption in the growth of the arrested cells. The method further involves evaluating the phenotype of the arrested cells. The step of evaluating the phenotype is analyzing morphology of at least one of the nucleus and the spindles. The step of evaluating the phenotype is determining a synergism with a microtubule-destabilizing agent. The microtubule-destabilizing agent is Vinca alkaloid, Taxol (RTM: paclitaxel), colchicines, and nocodazole.

Preferred Kit: The aneuploid strain is monosomic or tetraploid. The kit further has both monosomic strain and tetraploid strain.

L615 ANSWER 45 OF 52 WPIX COPYRIGHT 2008 THOMSON REUTERS on STN
ACCESSION NUMBER: 2005-638510 [65] WPIX
CROSS REFERENCE: 2003-247085
DOC. NO. CPI: C2005-191653 [65]
TITLE: New isogenic cell lines comprises
population of cells expressing wild type

Serial Number: 10/580,507

beta-catenin and activated beta-catenin polypeptide, for
identifying agents for selective killing of cells
expressing activated beta-catenin polypeptide

DERWENT CLASS: B04; D16
INVENTOR: WALDMAN T
PATENT ASSIGNEE: (WALD-I) WALDMAN T
COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
US 20050208652	A1	20050922	(200565)*	EN	25	[1]

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 20050208652	A1	Provisional	US 2001-274393P 20010309
US 20050208652	A1	Cont of	US 2002-93684 20020307
US 20050208652	A1		US 2005-104063 20050411

PRIORITY APPLN. INFO: US 2005-104063 20050411
US 2001-274393P 20010309
US 2002-93684 20020307

INT. PATENT CLASSIF.:

IPC RECLASSIF.: C07K0014-435 [I,C]; C07K0014-47 [I,A]; C12N0005-06 [I,A];
C12N0005-06 [I,C]; C12N0005-08 [I,A]; C12N0005-08 [I,C];
G01N0033-50 [I,A]; G01N0033-50 [I,C]

ECLA: C07K0014-47A1; C12N0005-06B30; G01N0033-50D2B

ICO: M07K0207:00; M12N0510:00; S01N0500:10

USCLASS NCLM: 435/366.000

BASIC ABSTRACT:

US 20050208652 A1 UPAB: 20051223

NOVELTY - A set of isogenic cell lines comprises:

(a) a first population of cells, which express only a wild type
beta-catenin polypeptide, or are null for beta-catenin expression, and

(b) at least a second population of cells, which express only an
activated beta-catenin polypeptide, or express a wild type beta-catenin
polypeptide, where the wild type beta-catenin polypeptide functions as an
activated beta-catenin polypeptide, is new.

DETAILED DESCRIPTION - A set of isogenic cell lines comprises:

(a) a first population of cells, which express only a wild type beta-
catenin polypeptide, or are null for beta-catenin expression; and

(b) at least a second population of cells, which express only an
activated beta-catenin polypeptide, or express a wild type beta-catenin
polypeptide, where the wild type beta-catenin polypeptide functions as an
activated beta-catenin polypeptide, where at least one of the first population
of cells or the second population of cells contains a disrupted beta-catenin
gene, and where, except for a nucleotide sequence of a beta-catenin gene, the
first population of cells and the at least second population of cells are
substantially genetically identical.

INDEPENDENT CLAIMS are also included for:

(1) a recombinant nucleic acid molecule comprising at least a first
polynucleotide having a first end and a second end, where the polynucleotide
is flanked at the first end by a first nucleotide sequence of a beta-catenin
gene and is flanked at the second end by a second nucleotide sequence of a
beta-catenin gene, where the polynucleotide is heterologous with respect to
the beta-catenin gene, the first and second nucleotide sequences of the beta-
catenin gene are different from each other, and each of the first and second

Serial Number: 10/580,507

nucleotide sequences of the beta-catenin gene can specifically hybridize to a beta-catenin gene under physiological conditions;

(2) a vector comprising the recombinant nucleic acid molecule;

(3) producing a set of isogenic cell lines;

(4) a set of isogenic cell lines produced by the method above, the set of isogenic cell lines comprising a first population of cells that express a wild type beta-catenin polypeptide and at least a second population of cells that express an activated beta-catenin polypeptide; and

(5) identifying a therapeutic agent that allows selective killing of cells expressing an activated beta-catenin polypeptide.

USE - The set of isogenic cell lines is useful for identifying therapeutic agents that allow selective killing of cells expressing an activated beta-catenin polypeptide, but not cells expressing a wild-type beta-catenin polypeptide. MANUAL CODE: CPI: B04-E03F; B04-E08; B04-F0100E; B11-C08E7; B12-K04E1;

D05-H09; D05-H12A; D05-H12E; D05-H14B

TECH

BIOTECHNOLOGY - Preparation (claimed): Producing a set of isogenic cell lines comprising a first population of cells that express a wild type beta-catenin polypeptide and at least a second population of cells that express an activated beta-catenin polypeptide comprises:
(A) introducing the recombinant nucleic acid molecule into cells that are heterozygous for a mutant beta-catenin gene, which encodes an activated beta-catenin polypeptide, and a wild type beta-catenin gene, which encodes a wild type beta-catenin polypeptide; and
(B) selecting a first population of cells derived from a cell containing the recombinant nucleic acid molecule integrated into only the mutant beta-catenin gene, where the cells express the wild type beta-catenin polypeptide, and at least a second population of cells derived from a cell containing the recombinant nucleic acid molecule integrated into only the wild type beta-catenin gene, where the cells express the activated beta-catenin polypeptide, thus producing a set of isogenic cell lines, which comprises at least a first population of cells that express a wild type beta-catenin polypeptide and at least a second population of cells that express an activated beta-catenin polypeptide. The polynucleotide in the recombinant nucleic acid molecule encodes a polypeptide, and where, optionally, the polypeptide is neomycin acetyltransferase.

Preferred Cell Lines: The cells of the first population of cells and the second population of cells are diploid. The cells of the first population of cells are hemizygous for a wild type beta-catenin gene. The set of isogenic cell lines further comprises at least a third population of cells, where the third population of cells, when present, optionally:

(a) expresses a wild type beta-catenin polypeptide and an activated beta-catenin polypeptide;

(b) is heterozygous for a wild type beta-catenin gene and a mutant beta-catenin gene, which encodes the activated beta-catenin polypeptide;

(c) is hemizygous for a wild type beta-catenin gene, and has been genetically modified to contain a polynucleotide encoding an activated beta-catenin polypeptide; or

(d) is null for beta-catenin expression. The cells of the first population of cells and the cells of the second population cells are mammalian cells. Preferably, the mammalian cells are human cells, which are derived from human cancer cells. The human cancer cells are HCT116 human colon adenocarcinoma cell lines.

The set of isogenic cell lines further comprises:

(a) a first population of cells, which express a wild type beta-catenin polypeptide, where the first population of cells is hemizygous for a wild type beta-catenin gene;

Serial Number: 10/580,507

(b) a second population of cells, which express an activated beta-catenin polypeptide, where the second population of cells is hemizygous for a mutant beta-catenin gene, which encodes the activated beta-catenin polypeptide;

(c) a third population of cells, which is null for beta-catenin expressions;

(d) a fourth population of cells, which expresses a wild type beta-catenin polypeptide, or at least a fourth population of cells, which expresses an activated beta-catenin polypeptide, where the fourth population of cells is homozygous for a mutant beta-catenin gene, which encodes the activated beta-catenin polypeptide; and

(e) a fifth population of cells, which expresses an activated beta-catenin polypeptide, where the fifth population of cells is homozygous for a mutant beta-catenin gene, which encodes the activated beta-catenin polypeptide. The cells of the second population of cells are homozygous for a wild type beta-catenin gene, or where the cells of the second population of cells are hemizygous for a wild type beta-catenin gene. The first and second nucleotide sequences of the beta-catenin gene specifically hybridize to a wild type beta-catenin gene or to a mutant beta-catenin gene, which encodes an activated beta-catenin polypeptide, or where the first and second nucleotide sequences of the beta-catenin gene specifically hybridize to both a wild type beta-catenin gene and a mutant beta-catenin gene, which encodes an activated beta-catenin polypeptide. Preferred Method: Identifying a therapeutic agent that allows selective killing of cells expressing an activated beta-catenin polypeptide comprises:

(A) contacting the isogenic set of cells with at least a test agent to be examined for therapeutic activity; and

(B) detecting selective killing of the cells expressing the activated beta-catenin polypeptide as compared to the cells expressing the wild type beta-catenin polypeptide, thus identifying a therapeutic agent that allows selective killing of cells expressing an activated beta-catenin polypeptide.

The therapeutic agent selectively kills the cells expressing the activated beta-catenin polypeptide. The method further comprises contacting the set of isogenic cell lines with a toxic agent, and identifying a therapeutic agent that protects the cells expressing the wild type beta-catenin polypeptide from the toxic effect of the toxic agent, thus allowing selective killing of cells expressing the activated beta-catenin polypeptide. The test agent also comprises many test agents. Preferably, the method is performed in a high throughput format.

L615 ANSWER 46 OF 52 WPIX COPYRIGHT 2008 THOMSON REUTERS on STN
ACCESSION NUMBER: 2004-635572 [61] WPIX
DOC. NO. CPI: C2004-228459 [61]
TITLE: New isogenic pair of human cancer cells
, comprising a PTEN-deficient cell, and an
isogenic control cell, useful for
identifying anti-cancer agents and agents that modulate
PTEN activity
DERWENT CLASS: B04; D16
INVENTOR: LEE C; WALDMAN T
PATENT ASSIGNEE: (GEOU-C) UNIV GEORGETOWN
COUNTRY COUNT: 106

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN	IPC
WO 2004074459	A2	20040902	(200461)*	EN	45	[7]	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2004074459	A2	WO 2004-US5179	20040219

PRIORITY APPLN. INFO: US 2003-448799P 20030219

INT. PATENT CLASSIF.:

MAIN: C12N000-00

ECLA: C07K0014-47A33; C12N0009-16

ICO: M07K0205:00

BASIC ABSTRACT:

WO 2004074459 A2 UPAB: 20050531

NOVELTY - An isogenic pair of human cancer cells, where members of the pair differ in the endogenous PTEN alleles and where a first member, referred to as the PTEN-deficient cell, comprises a mutation in an endogenous PTEN allele, and a second member, referred to as the isogenic control cell, comprises two normal endogenous PTEN alleles, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

- (1) an isolated recombinant human somatic cell, where at least one endogenous PTEN allele comprises a mutation, where the mutation preferably renders the PTEN allele non-functional;
- (2) a somatic cell gene targeting vector comprising, in the following order: at least 800 nucleotides homologous to a region of the second intron of a PTEN gene; nucleic acid encoding a selectable marker; and at least 800 nucleotides homologous to a region of the third intron of a PTEN gene;
- (3) methods for generating a human somatic cell comprising a mutation in at least one endogenous PTEN allele by gene targeting;
- (4) methods for identifying an anti-cancer agent;
- (5) an isolated recombinant human somatic cell, where both endogenous PTEN alleles comprise a deletion of all or a portion of exon 2 of the PTEN gene, resulting in a cell which undergoes transformation to turn into a cancer cell;
- (6) a method of treating cancer in a subject;
- (7) a packaged pharmaceutical composition, which composition includes an amount of an anti-cancer agent identified as above, and sufficient for use in treating cancer;
- (8) a method of identifying an agent that modulates PTEN activity;
- (9) a method of modulating PTEN activity in a subject with a PTEN-associated condition;
- (10) a packaged pharmaceutical composition, which composition includes an amount of a PTEN-modulating agent identified as above sufficient for use in treating a PTEN-associated condition;
- (11) phenotypic data associated with the isogenic pair, where the phenotypic data is in an electronic database; and
- (12) a method for identifying a candidate agent that restores at least one PTEN function in PTEN-deficient cells.

ACTIVITY - Cytostatic.

MECHANISM OF ACTION - PTEN activity modulator.

USE - The isogenic pair of human cancer cells are useful for identifying anti-cancer agents and agents that modulate PTEN activity. The anti-cancer agent identified is useful in the manufacture of a medicament for the treatment of cancer (claimed). MANUAL CODE: CPI: B04-E08; B04-F02A0E; B11-C07B1; B11-C08; B12-K04E;

B14-H01; D05-H09; D05-H12E; D05-H14B2

TECH

BIOTECHNOLOGY - Preferred Cell: The isolated recombinant human somatic cell is a human cancer cell. The cell is selected from glioblastoma

Serial Number: 10/580,507

multiforme cell, a colon adenocarcinoma cell, a malignant melanoma cell, an endometrial carcinoma cell, a prostate adenocarcinoma cell, a thyroid cancer cell and a breast cancer cell. The mutation is a deletion of all or a portion of exon 2 of the PTEN allele. Both endogenous PTEN alleles comprise a deletion of all or a portion of exon 2 of the PTEN gene. The mutation can be a dominant negative PTEN mutation, or a constitutive PTEN mutation.

Preferred Isogenic Pair: The isogenic pair of human cancer cells comprises the first member having a mutation in both endogenous PTEN alleles. The mutation is a deletion of all or a portion of exon 2 of the PTEN gene.

Preferred Vector: The somatic cell gene-targeting vector comprises a selectable marker, such as an antibiotic resistance gene, preferably a neomycin resistance gene. The somatic cell gene-targeting vector alternatively comprises at least 800 nucleotides, referred to as the first homology arm, homologous to a region of the second intron of a PTEN gene; a first lox site; an internal ribosome entry site (IRES); nucleic acids encoding a selectable marker; a second lox site situated in the same orientation as the first lox site; and at least 800 nucleotides, referred to as the second homology arm, homologous to a region of the third intron of a PTEN gene. The first and second lox sites are loxP sites. The first homology arm comprises 1665 nucleotides immediately upstream of the second exon of the PTEN gene, and the second homology arm comprises 2549 nucleotides beginning at nucleotide 409 of the third intron of the PTEN gene.

Preferred Method: Generating a human somatic cell comprising a mutation in at least one endogenous PTEN allele by gene targeting comprises transfecting human somatic cells with the targeting vector, thus producing transfected human somatic cells; and maintaining transfected cells under conditions appropriate for integration of the targeting vector into the endogenous PTEN allele(s) in the transfected cells, thus producing cells having the targeting vector integrated in at least one endogenous PTEN allele. The method further comprises transfecting cells having a targeting vector integrated in a first endogenous PTEN allele produced by a method with a second targeting vector, where the second targeting vector has a selectable marker different from the first integrated targeting vector; and maintaining transfected cells under conditions appropriate for integration of the second targeting vector into a second endogenous PTEN allele in the transfected cells, thus producing cells having targeting vectors integrated in both endogenous PTEN alleles. This method alternatively comprises transfecting human somatic cells with the targeting vector, thus producing transfected human somatic cells; maintaining transfected cells under conditions appropriate for integration of the targeting vector into the endogenous PTEN allele in the transfected cells, thus producing cells having the targeting vector integrated in a first endogenous PTEN allele; providing cells having the targeting vector integrated in one endogenous PTEN allele with Cre, thereby producing Cre-containing cells; and maintaining the Cre-containing cells under conditions appropriate for Cre to excise one of the two lox sites and nucleic acids encoding selectable marker, thus producing PTEN cells comprising deletion in one endogenous PTEN allele; transfecting PTEN cells with the targeting vector; and maintaining transfected cells under conditions appropriate for integration of the targeting vector into a second PTEN allele in the transfected cells, thereby producing PTEN cells comprising deletion in both endogenous PTEN alleles. Providing cells with Cre comprises infecting the cells with Cre adenovirus, or transfecting the cells with a Cre-expressing vector. Identifying an anti-cancer agent comprises contacting the isogenic pair with a candidate agent; and assessing the growth of the isogenic pair, where if the agent preferentially slows the growth of the PTEN-deficient cell as

Serial Number: 10/580,507

compared to the isogenic control cell, the agent is an anti-cancer agent. This method alternatively comprises contacting the isogenic pair with a candidate agent; and determining viability of the isogenic pair, where if the agent preferentially causes death in the PTEN-deficient cell as compared to the isogenic control cell, the agent is an anti-cancer agent. The method can comprise incubating the cell in the presence of a candidate agent; and determining viability of the PTEN-deficient cell, where if the agent causes cell death in the PTEN-deficient cell, the agent is an anti-cancer agent. The viability of the cells is determined by applying a dye to the cell, assessing the incorporation of the dye by the cell, where the incorporation of the dye by the cell indicating death of the cell. The dye is trypan blue. The method comprises contacting the cell with a candidate agent; and assessing the ability of the agent to prevent transformation resulted from the deletion of both endogenous PTEN alleles, where if the candidate agent prevents or slows down the transformation, the agent is an anti-cancer agent. Treating cancer in a subject comprises administering to the subject an anti-cancer agent identified by the method. Identifying an agent that modulates PTEN activity comprises comparing gene expression in a PTEN-deficient cell with gene expression in the isogenic control cell of the isogenic pair; identifying a gene whose expression is different between the two members of the isogenic pair; contacting the isogenic pair with a candidate agent; and assessing the ability of the agent to restore the altered expression of the gene identified in a PTEN-deficient cell to the level of expression in an isogenic control cell, where if the agent restores the altered expression of the gene identified in a PTEN-deficient cell to the level of expression in an isogenic control cell, the agent is an agent that modulates PTEN activity. Modulating PTEN activity in a subject with a PTEN-associated condition comprises administering to the subject an agent identified by the method. The PTEN-associated condition is cancer and agent is an anti-cancer agent. Identifying a candidate agent that restores at least one PTEN function in PTEN-deficient cells comprises contacting the isogenic pair with a candidate agent; assessing at least one function of PTEN in the isogenic pair; and comparing the at least one function of PTEN in the PTEN-deficient cell to the isogenic control cell, where if the at least one function of PTEN in the PTEN-deficient cell is comparable to that in the isogenic control cell, the candidate agent is an agent that restores the at least one PTEN function. The at least one function of PTEN is assessed by measuring subcellular localization of FOXO1a protein.

Preferred Pharmaceutical: The packaged pharmaceutical further comprises a label and/or instructions for use of the pharmaceutical composition in the treatment of cancer.

L615 ANSWER 47 OF 52	WPIX COPYRIGHT 2008	THOMSON REUTERS on STN
ACCESSION NUMBER:	2003-513640 [48]	WPIX
DOC. NO. CPI:	C2003-137571 [48]	
TITLE:	Producing a diploid human pronucleus for generating stem cells from which autologous, isogenic cells for transplantation therapy are derived by exposing the nucleus of a differentiated human cell to the cytoplasm of an oocyte	
DERWENT CLASS:	B04; D16	
INVENTOR:	CAMPBELL K; CIBELLI J; WEST M	
PATENT ASSIGNEE:	(ADCE-N) ADVANCED CELL TECHNOLOGY; (ADCE-N) ADVANCED CELL TECHNOLOGY INC	
COUNTRY COUNT:	101	

Serial Number: 10/580,507

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 2003046141	A2	20030605	(200348)*	EN	63	[11]
US 20030232430	A1	20031218	(200401)	EN		
AU 2002360424	A1	20030610	(200419)	EN		
EP 1456374	A2	20040915	(200460)	EN		
JP 2005510232	W	20050421	(200528)	JA	32	
MX 2004005010	A1	20050401	(200571)	ES		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003046141	A2	WO 2002-US37899	20021126
US 20030232430	A1	US 2001-332510P	20011126
AU 2002360424	A1	AU 2002-360424	20021126
EP 1456374	A2	EP 2002-795677	20021126
US 20030232430	A1	US 2002-304020	20021126
EP 1456374	A2	WO 2002-US37899	20021126
JP 2005510232	W	WO 2002-US37899	20021126
MX 2004005010	A1	WO 2002-US37899	20021126
JP 2005510232	W	JP 2003-547576	20021126
MX 2004005010	A1	MX 2004-5010	20040526

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2002360424	A1	WO 2003046141 A
EP 1456374	A2	WO 2003046141 A
JP 2005510232	W	WO 2003046141 A
MX 2004005010	A1	WO 2003046141 A

PRIORITY APPLN. INFO: US 2001-332510P 20011126
US 2002-304020 20021126

INT. PATENT CLASSIF.:

MAIN: C12N005-10

IPC RECLASSIF.: A61K0035-28 [I,A]; A61K0035-28 [I,C]; A61K0035-48 [I,A];
A61K0035-48 [I,C]; A61P0013-00 [I,C]; A61P0013-12 [I,A];
A61P0025-00 [I,A]; A61P0025-00 [I,C]; A61P0043-00 [I,A];
A61P0043-00 [I,C]; A61P0005-00 [I,C]; A61P0005-50 [I,A];
A61P0009-00 [I,A]; A61P0009-00 [I,C]; C12N0015-09 [I,A];
C12N0015-09 [I,C]; C12N0015-87 [I,A]; C12N0015-87 [I,C];
C12N0005-08 [I,A]; C12N0005-08 [I,C]; C12N0005-10 [I,A];
C12N0005-10 [I,C]

ECLA: C12N0015-87C

ICO: M12N0517:04; M12N0517:10

USCLASS NCLM: 435/366.000

BASIC ABSTRACT:

WO 2003046141 A2 UPAB: 20060119

NOVELTY - Producing a diploid human pronucleus comprising exposing the nucleus of a differentiated human cell to the cytoplasm of an oocyte, is new.

USE - The method is useful for generating stem cells from which autologous, isogenic cells for transplantation therapy are derived. The method is useful for identifying and analyzing the molecular mechanisms of epigenetic imprinting and the genetic regulation of embryogenesis and development. MANUAL CODE: CPI: B04-F0200E; B04-F0300E; D05-H14B2; D05-H17

Serial Number: 10/580,507

L615 ANSWER 48 OF 52 WPIX COPYRIGHT 2008 THOMSON REUTERS on STN
ACCESSION NUMBER: 2003-381567 [36] WPIX
DOC. NO. CPI: C2003-101319 [36]
DOC. NO. NON-CPI: N2003-304827 [36]
TITLE: Pair of cells useful for identifying compounds that
specifically affect gene of interest or its expression
products e.g. for screening compounds for activity, are
isogenic except for gene of interest and gene encoding
fluorescent protein
DERWENT CLASS: B03; B04; C02; C07; D16; S03
INVENTOR: KINZLER K W; TORRANCE C J; VOGEL STEIN B; VOGELSTEIN B
PATENT ASSIGNEE: (KINZ-I) KINZLER K W; (TORR-I) TORRANCE C J; (UYJO-C)
UNIV JOHNS HOPKINS; (UYJO-C) UNIV JOHNS HOPKINS SCHOOL
MEDICINE; (STEI-I) VOGEL STEIN B
COUNTRY COUNT: 99

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 2003027632	A2	20030403	(200336)*	EN	40	[7]
US 20030069256	A1	20030410	(200340)	EN		
AU 2002331585	A1	20030407	(200461)	EN		
KR 2004054694	A	20040625	(200470)	KO		
JP 2005511025	W	20050428	(200530)	JA	26	
EP 1585955	A2	20051019	(200568)	EN		
US 20050239051	A1	20051027	(200571)	EN		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003027632	A2	WO 2002-US25951	20020828
US 20030069256	A1	US 2001-961407	20010925
US 20050239051	A1 Cont of	US 2001-961407	20010925
AU 2002331585	A1	AU 2002-331585	20020828
EP 1585955	A2	EP 2002-768559	20020828
JP 2005511025	W	WO 2002-US25951	20020828
EP 1585955	A2	WO 2002-US25951	20020828
JP 2005511025	W	JP 2003-531137	20020828
KR 2004054694	A	KR 2004-704384	20040325
US 20050239051	A1	US 2005-159229	20050623

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2002331585	A1 Based on	WO 2003027632 A
JP 2005511025	W Based on	WO 2003027632 A
EP 1585955	A2 Based on	WO 2003027632 A

PRIORITY APPLN. INFO: US 2001-961407 20010925
US 2005-159229 20050623

INT. PATENT CLASSIF.:

MAIN: C12N005-08; C12N005-10; G01N-00
IPC ORIGINAL: A01N0043-02 [I,C]; A01N0043-04 [I,A]; A01N0043-64 [I,A];
A01N0043-64 [I,C]; C12N0005-00 [I,A]; C12N0005-00 [I,C];
C12N0005-10 [I,A]; C12N0005-10 [I,C]; C12Q0001-00 [I,A];
C12Q0001-00 [I,C]

Serial Number: 10/580,507

IPC RECLASSIF.: A61K0031-41 [I,A]; A61K0031-41 [I,C]; A61K0031-7042 [I,C]
; A61K0031-7068 [I,A]; A61P0035-00 [I,A]; A61P0035-00
[I,C]; A61P0043-00 [I,A]; A61P0043-00 [I,C]; C07D0257-00
[I,C]; C07D0257-04 [I,A]; C07H0019-00 [I,C]; C07H0019-06
[I,A]; C07H0019-16 [I,A]; C12N0015-09 [I,A]; C12N0015-09
[I,C]; C12N0005-10 [I,A]; C12N0005-10 [I,C]; C12Q0001-02
[I,A]; C12Q0001-02 [I,C]; G01N0033-15 [I,A]; G01N0033-15
[I,C]; G01N0033-50 [I,A]; G01N0033-50 [I,C]
ECLA: C07D0257-04D2B; C07H0019-16; G01N0033-50D2B;
G01N0033-50D2E2
USCLASS NCLM: 435/004.000
NCLS: 435/004.000; 435/006.000; 435/366.000; 514/381.000
BASIC ABSTRACT:

WO 2003027632 A2 UPAB: 20060119

NOVELTY - Pair of cells (I) comprising first cell (C1) and second cell (C2) are isogenic but for gene of interest and gene encoding fluorescent protein, where C1 has gene encoding first fluorescent protein of first absorption spectrum (AS) and emission spectrum (ES) and C2 comprises gene that encodes second fluorescent protein of second AS and ES, where AS and/or ES of C1 and C2 are not identical, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) preparation (M1) of (I), involves genetically modifying C1 to yield C2 that is isogenic with C1 but for a single gene of interest, transfecting C1 with a first gene that encodes a first fluorescent protein having a first AS and first ES, and transfecting C2 with a second gene that encodes a second fluorescent protein having a second AS and second ES, where either the first and second AS are not identical and/or the first and second ES are not identical;

(2) identifying (M2) a test compound as selectively affecting a gene of interest or its expression products, comprising culturing (I), contacting (I) with the test compound and identifying whether the test compound selectively affects the gene of interest or its expression products or downstream genes or products in its pathway by measuring whether the growth rate of (C1) is altered with respect (C2);

(3) a composition comprising at least 90% of a sulfinyl cytidine derivative (SC-D) (II) of formulae (Fla) and/or (Flb);

(4) a cytotoxic composition comprising a triphenyltetrazolium (TPT) of formula (F2) or its salt, solvate, prodrug and a carrier; and

(5) treating cancer by administering (II) to a patient.

ACTIVITY - Cytostatic.

In vivo administration of SC-D was performed to test for specificity for cancer. Two colon cancer cells, HCT116 and DLD-1, both of which harbor a single G13D point mutation in the c-Ki-Ras gene, were grown on xenografts in nude mice. Palpable tumors were established three to six days after cells were injected, at which point drug treatment was initiated. Drugs were administered every day by intraperitoneal injection in a total volume of 400 microl (phosphate buffered saline). Xenografts were measured (major and minor axis) every 2 days using calipers and tumor volume was calculated. DLD-1 tumors were approximately 45% smaller in mice treated with SC-D intraperitoneally for 20 days than in control, untreated mice. HCT-116 tumor growth was inhibited approximately 65% in animals treated with SC-D for the same time period.

MECHANISM OF ACTION - Tumor Growth Suppressor.

USE - (I) is useful for identifying a test compound as selectively affecting a gene of interest or its expression products or downstream genes or protein in its pathway, particularly for Ras genes, proteins or downstream genes or proteins in its pathway (claimed).

ADVANTAGE - (I) allows development of agents that specifically target a specific genotype, and thus are more efficacious and less toxic. Because the two cells to be compared can be co-cultured and assayed simultaneously a variety of

Serial Number: 10/580,507

errors encountered when screening cell pairs that are maintained in separate compartments are eliminated. Cell growth patterns can be followed over time and the early time points can serve as internal controls for each well, normalizing for variability of cell numbers across samples as well as for the inherent fluorescence of certain drugs. Assays involving engineered fluorescence proteins are highly cost-effective, because no additional reagents such as luciferase or pipetting steps are required for analysis of growth. MANUAL CODE: CPI: B04-B03A; B04-F0100E; B04-F0200E; B07-D13;

B11-C07B3; B11-C08E1; B11-C10; B12-K04E; B14-H01;
C04-B03A; C04-F0100E; C04-F0200E; C07-D13; C11-C07B3;
C11-C08E1; C11-C10; C12-K04E; C14-H01; D05-H09; D05-H12A;
D05-H12B1; D05-H14; D05-H14B2; D05-H17A6
EPI: S03-E04E; S03-E14H

TECH

BIOTECHNOLOGY - Preferred Cells: The cells are contained within the same undivided container. The pair of cells comprises:

- (1) C1 which is homozygously wild-type for the gene of interest and C2 which is homozygously mutant for the gene of interest (preferably the gene of interest in C2 is homozygously deleted);
- (2) C1 comprising two wild-type alleles of the gene of interest and C2 comprising a wild-type allele and a mutant allele of the gene of interest, where the mutant allele is dominant;
- (3) where the gene of interest is an oncogene, C1 is homozygous for a mutant allele of the oncogene and C2 comprises a homozygous deletion of the mutant oncogene;
- (4) C1 expressing a gene of interest, and C2 not expressing the gene of interest,
- (5) C1 comprising wild-type allele and a mutant allele of the gene of interest and C2 which is hemizygous for the wild-type allele of the gene of interest, or
- (6) C1 expressing a protein encoded by the gene of interest and C2 not expressing a protein encoded by the gene of interest.

C1 and C2 are mammalian cells, preferably human cells. The cells are cancer cells such as colon tumor cells or breast tumor cells e.g., HCG116 cells or DLD-1 cells. The first and second fluorescent proteins are chosen from green fluorescent protein, red fluorescent protein, blue fluorescent protein, yellow fluorescent protein and cyan fluorescent protein, preferably the first fluorescent protein is blue and the second fluorescent protein is yellow. Most preferably the gene of interest is Ras and where the Ras genotype of C1 is c-Ki-RasWT/mutant and the Ras genotype of C2 is c-Ki-RasWT/null.

Preferred Process: In M1, C1 and C2 are co-cultured in equal numbers. The fluorescent proteins are detected using fluorescence microscopy or high-throughput fluorescence microscopy to assess the growth rate.

L615 ANSWER 49 OF 52 WPIX COPYRIGHT 2008 THOMSON REUTERS on STN
ACCESSION NUMBER: 2003-247085 [24] WPIX
CROSS REFERENCE: 2005-638510
DOC. NO. CPI: C2003-063502 [24]
TITLE: New set of isogenic cell lines useful
for identifying therapeutic agents for treating cancer
comprise a first and second population of cells
respectively expressing only a wild type and activated
beta-catenin polypeptide
DERWENT CLASS: B04; D16
INVENTOR: WALDMAN T
PATENT ASSIGNEE: (WALD-I) WALDMAN T
COUNTRY COUNT: 98

PATENT INFORMATION:

Serial Number: 10/580,507

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
US 20020132340	A1	20020919	(200324)*	EN	26[1]	
WO 2002072768	A2	20020919	(200324)	EN		
AU 2002245648	A1	20020924	(200433)	EN		
AU 2002245648	A8	20051027	(200626)	EN		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 20020132340	A1 Provisional	US 2001-274393P	20010309
US 20020132340	A1	US 2002-93684	20020307
AU 2002245648	A1	AU 2002-245648	20020307
WO 2002072768	A2	WO 2002-US7207	20020307
AU 2002245648	A8	AU 2002-245648	20020307

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2002245648	A1 Based on	WO 2002072768 A
AU 2002245648	A8 Based on	WO 2002072768 A

PRIORITY APPLN. INFO: US 2002-93684 20020307
US 2001-274393P 20010309

INT. PATENT CLASSIF.:

MAIN: C12N015-63; C12N005-08
SECONDARY: C07H021-04; C12N015-85
IPC RECLASSIF.: C07K0014-435 [I,C]; C07K0014-47 [I,A]; C12N0005-06 [I,A];
C12N0005-06 [I,C]; C12N0005-08 [I,A]; C12N0005-08 [I,C];
G01N0033-50 [I,A]; G01N0033-50 [I,C]
ECLA: C07K0014-47A1; C12N0005-06B30; G01N0033-50D2B
ICO: M07K0207:00; M12N0510:00; S01N0500:10
USCLASS NCLM: 435/325.000

BASIC ABSTRACT:

US 20020132340 A1 UPAB: 20060119

NOVELTY - A set of isogenic cell lines comprising a first population of cells that express only a wild type beta-catenin polypeptide, and a second population of cells that express only an activated beta-catenin polypeptide, is new. At least one of the first or second population of cells contains a disrupted beta-catenin gene, where the population of cells are substantially genetically identical.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

(1) A recombinant nucleic acid molecule comprising at least a first polynucleotide having a first and second end, where the polynucleotide is flanked at the first end by a first nucleotide sequence a beta-catenin gene and is flanked at the second end by a second nucleotide sequence of beta-catenin gene, and is heterologous with respect to the beta-catenin gene; and the first and second nucleotide sequences of the beta-catenin gene are different from each other and can specifically hybridize to a beta-catenin gene under physiological conditions;

(2) A vector comprising the recombinant nucleic acid molecule;

(3) A host cell containing the vector;

(4) Producing a set of isogenic cell lines that comprises a population of cells that express a wild-type beta-catenin polypeptide and at least a second population of cells that express an activated beta-catenin polypeptide;

(5) The set of isogenic cell lines produced in (4);

Serial Number: 10/580,507

(6) Identifying a therapeutic agent that allows selective killing of cells expressing an activated beta-catenin polypeptide; and

(7) A therapeutic agent identified in (6).

ACTIVITY - Cytostatic.

No biological data given.

MECHANISM OF ACTION - None given.

USE - The set of isogenic cell lines are useful for identifying therapeutic agents that allow selective killing of cells expressing an activated beta-catenin polypeptide for treating cancer that is characterized, at least in part, by the presence of cancer cells that express an activated beta-catenin polypeptide. The therapeutic agent is useful for treating a cancer patient, where the cancer is characterized, at least in part, by the presence of cancer cells that express an activated beta-catenin polypeptide by administering to the patient the therapeutic agent to selectively kill cancer cells in the patient. The treatment method further comprises administering one or more treatment modalities to the patient. (claimed) The cancer comprises malignant and non-malignant tumors such as colon cancer and melanoma, desmoid tumors that are common in patients with FAP, hepatoblastoma, medulloblastoma, thyroid cancers, hepatocellular carcinoma, Wilm's tumor or prostate cancer.

MANUAL CODE: CPI: B04-C01; B04-E02F; B04-E08; B04-F02A0E; B04-L0400E; B04-N0200E; B04-N08; B11-C08; B11-C10A; B12-K04E; B14-H01; B14-S03; D05-H09; D05-H12B2; D05-H12E; D05-H14B2; D05-H17B3; D05-H17B6; D05-H17C1; D05-H18

TECH

BIOTECHNOLOGY - Preferred Cell Line: In the set of isogenic cell lines, the cells of both populations can be near diploid or diploid, and comprises a disrupted mutant beta-catenin gene. The cells of the first population are hemizygous for a wild type beta-catenin gene, while the cells of the second population are hemizygous for a mutant beta-catenin gene, which encodes the beta-catenin polypeptide. The set of isogenic cell lines further comprises at least a third population of cells. The third population of cells expresses a wild type beta-catenin polypeptide and an activated beta-catenin polypeptide. This third population can be heterozygous for a wild-type or mutant beta-catenin gene that encodes the activated beta-catenin polypeptide, or hemizygous for a wild type beta-catenin gene and has been genetically modified to contain a polynucleotide encoding an activated beta-catenin polypeptide. The third population of cells is null for beta-catenin expression. The cells of the first and second populations are mammalian cells, preferably human cells derived from human cancer cells. The human cancer cells are HCT116 human colon adenocarcinoma cell lines. The set of isogenic cell lines further comprises at least a fourth population of cells homozygous for a wild type or mutant beta-catenin gene that respectively expresses a wild type or activated beta-catenin polypeptide. At least a fifth population of cell can also comprise the set of isogenic cell lines. This fifth population expresses an activated beta-catenin polypeptide, and is homozygous for the mutant beta-catenin gene.

Preferred Molecule: The first polynucleotide of the recombinant nucleic acid molecule encodes a polypeptide. The expression of the polypeptide in a cell confers a detectable phenotype on the cell. The polypeptide encodes neomycin acetyltransferase. This expression is detectable as an increased or decreased susceptibility of cell expressing the polypeptide to a toxic agent, as compared to cells not expressing the polypeptide, or as luminescence or fluorescence. The polypeptide provides a means to isolate a cell expressing the polypeptide, which is preferably a fluorescent polypeptide. This polypeptide comprises a ligand or a ligand-binding domain or a receptor, or an epitope that is specifically bound to an antibody or its antigen-binding fragment. The polypeptide can also be a

Serial Number: 10/580,507

fusion polypeptide. The first and second nucleotide sequences of the recombinant nucleic acid molecule independently are upstream and downstream of the beta-catenin gene coding sequence.

Preferred Method: Producing a set of isogenic cell lines comprises introducing the recombinant nucleic acid molecule into cells that are heterozygous for a mutant and wild type beta-catenin genes, selecting the first and second population of cells derived from a cell containing the recombinant nucleic acid molecule respectively integrated into the mutant and wild-type beta-catenin gene. The recombinant nucleic acid molecule is integrated into the cell genome by homologous recombination. This method further comprises isolating at least a third population of cells derived from a cell containing the recombinant nucleic acid molecule integrated into both the mutant and wild-type beta catenin genes.

Identifying a therapeutic agent that allows selective killing of cells expressing an activated beta-catenin polypeptide comprises contacting the isogenic set of cells with at least a test agent to be examined for therapeutic activity, and detecting selective killing of the cells expressing the activated beta-catenin polypeptide as compared to the cells expressing the wild-type beta-catenin polypeptide. The therapeutic agent selectively kills the cells expressing an activated beta-catenin polypeptide. This method further comprises contacting the set of isogenic cell lines with a toxic agent, and identifying a therapeutic agent that protects the cells expressing the wild type beta-catenin polypeptide from the toxic effect of the toxic agent, thus allowing the killing of cells expressing the activated beta-catenin polypeptide. The cells expressing the activated beta-catenin polypeptide are cancer cells, preferably human cancer cells. The test agents comprises library of test agents, preferably combinatorial library of test agents. The test agent can be a peptide, peptidomimetic, polynucleotide or small organic molecule. This method is performed in a high throughput format. Preferred Agent: The agent is preferably a cancer therapeutic agent.

L615 ANSWER 50 OF 52 WPIX COPYRIGHT 2008 THOMSON REUTERS on STN
ACCESSION NUMBER: 2001-502616 [55] WPIX
DOC. NO. CPI: C2001-151181 [55]
TITLE: New composition comprising an allogeneic tumor cell,
useful for stimulating an immune response in a patient
having an adenocarcinoma, especially useful for
treating colorectal, breast, lung or prostate cancer
DERWENT CLASS: B04; D16
INVENTOR: BARTHOLOMEW R M; CARLO D J; GOLD D P; SHAWLER D L; SOBO
R E
PATENT ASSIGNEE: (BART-I) BARTHOLOMEW R M; (CARL-I) CARLO D J; (GOLD-I)
GOLD D P; (IMMU-N) IMMUNE RESPONSE CORP; (KIMM-N) KIMMEL
CANCER CENT SIDNEY; (SHAW-I) SHAWLER D L; (SOBO-I) SOBO
R E
COUNTRY COUNT: 92

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 2001054716	A2	20010802	(200155)*	EN	131	[8]
AU 2001031204	A	20010807	(200174)	EN		
US 20020006413	A1	20020117	(200212)	EN		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
-----------	------	-------------	------

Serial Number: 10/580,507

WO 2001054716 A2	WO 2001-US2731 20010126
US 20020006413 A1 Provisional	US 2000-178498P 20000127
US 20020006413 A1 Provisional	US 2000-185335P 20000228
AU 2001031204 A	AU 2001-31204 20010126
US 20020006413 A1	US 2001-772102 20010126

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001031204 A	Based on	WO 2001054716 A

PRIORITY APPLN. INFO: US 2000-185335P 20000228
US 2000-178498P 20000127
US 2001-772102 20010126

INT. PATENT CLASSIF.:

IPC RECLASSIF.: A61K0039-00 [I,A]; A61K0039-00 [I,C]; A61K0048-00 [N,A];
A61K0048-00 [N,C]; A61P0035-00 [I,A]; A61P0035-00 [I,C];
A61P0037-00 [I,C]; A61P0037-04 [I,A]

ECLA: A61K0039-00D6

ICO: K61K0039:515A; K61K0039:515C; K61K0048:00

USCLASS NCLM: 424/277.100

NCLS: 424/093.210

BASIC ABSTRACT:

WO 2001054716 A2 UPAB: 20050526

NOVELTY - A composition for stimulating an immune response in a patient having an adenocarcinoma, is new. The composition comprises an allogeneic tumor cell selected from SW620 cell, COLO 205 cell and SW403 cell, and a physiological carrier.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a method of stimulating an immune response in a patient having adenocarcinoma or colorectal cancer, comprising administering to the patient:

- (a) one or more allogeneic tumor cells; or
- (b) the composition.

The allogeneic cell stimulates an immune response to an autologous tumor cell in the patient.

ACTIVITY - Immunostimulant; cytostatic.

In 4 of 5 patients tested initially, the results indicated that immunizations with the genetically engineered vaccine increased the frequency of tumor cytotoxic T cell precursor (pCTL) approximately 5-10 fold against human leukocyte antigen (HLA)-A2 autologous and allogeneic tumors. Cloned CTL from the vaccinated patients demonstrated lysis of multiple HLA-A2+ tumor cells but not isogenic normal fibroblasts, indicating specificity for shared HLA-A2 restricted tumor associated antigen epitopes. These results indicated that colon carcinomas express shared tumor antigens and that immunization with genetically modified semi-allogeneic tumor cells enhanced anti-tumor immune responses to autologous tumors.

MECHANISM OF ACTION - Cytotoxic T lymphocyte stimulator; vaccine.

USE - The composition is useful for stimulating an immune response in a patient having an adenocarcinoma, e.g. colon, breast, lung or prostate adenocarcinoma. Specifically, the composition is useful for stimulating an immune response in a patient having colorectal cancer. (All claimed). The composition is useful for treating colorectal, breast, lung or prostate cancer.

ADVANTAGE - The use of allogeneic tumor cells provides a generic source of antigen that can be administered to a variety of patients, in contrast to using autologous tumor cells, which must be isolated from each individual patient. The allogeneic cells are suitable as a cancer vaccine and can stimulate an immune response against autologous tumor cells of a cancer patient.

Serial Number: 10/580,507

MANUAL CODE: CPI: B04-F02; B14-G01; B14-H01; B14-H01B; B14-N07A;
B14-S11C; D05-H07; D05-H08

TECH

BIOTECHNOLOGY - Preferred Composition: The composition further comprises an allogeneic cell that is genetically modified to express a cytokine. The cytokine-expressing allogeneic cell is a fibroblast or a tumor cell. In particular, the cytokine is interleukin-2 (IL-2) or granulocyte macrophage-colony stimulating factor (GM-CSF). In particular, the cytokine-expressing allogeneic tumor cell expresses membrane-bound GM-CSF. At least one of the allogeneic tumor cells is genetically modified to express CD80 (B7.1), where the genetically modified cell is a SW620 cell or COO 205 cell, and where the composition further comprises a SW403 cell. Preferred Method: In the method, the immune response comprises a cytotoxic T lymphocyte (CTL) response. A CTL response to autologous non-tumor cells is minimized, where the autologous non-tumor cells are peripheral blood mononuclear cells.

L615 ANSWER 51 OF 52 WPIX COPYRIGHT 2008 THOMSON REUTERS on STN
ACCESSION NUMBER: 1997-042855 [04] WPIX
DOC. NO. CPI: C1997-013588 [04]
TITLE: NES1 polypeptide, negatively associated with epithelial cell malignancy - provides diagnostic marker for breast, cervical and prostate carcinoma, and can be useful for treating these diseases
DERWENT CLASS: B04; D16; Q79
INVENTOR: BAND V
PATENT ASSIGNEE: (NEWE-N) NEW ENGLAND MEDICAL CENT HOSPITALS INC
COUNTRY COUNT: 21

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 9639175	A1	19961212	(199704)*	EN	77	[11]
AU 9658009	A	19961224	(199715)	EN		
US 5736377	A	19980407	(199821)	EN	25	[11]
US 5843694	A	19981201	(199904)	EN		
US 6153387	A	20001128	(200063)	EN		
US 20020106367	A1	20020808	(200254)	EN		
US 7033746	B2	20060425	(200628)	EN		
US 20060099630	A1	20060511	(200633)	EN		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9639175	A1	WO 1996-US7343	19960521
US 5736377	A	US 1995-467155	19950606
US 5843694	A Div Ex	US 1995-467155	19950606
US 6153387	A Div Ex	US 1995-467155	19950606
US 20020106367	A1 Div Ex	US 1995-467155	19950606
US 7033746	B2 Div Ex	US 1995-467155	19950606
US 5843694	A	US 1996-628198	19960405
US 6153387	A Cont of	US 1996-628198	19960405
US 20020106367	A1 Cont of	US 1996-628198	19960405
US 7033746	B2 Cont of	US 1996-628198	19960405
AU 9658009	A	AU 1996-58009	19960521
US 6153387	A	US 1998-201038	19981130
US 20020106367	A1 Cont of	US 1998-201038	19981130
US 7033746	B2 Cont of	US 1998-201038	19981130

Serial Number: 10/580,507

US 20020106367 A1 Div Ex	US 2000-605176 20000628
US 7033746 B2 Div Ex	US 2000-605176 20000628
US 20020106367 A1	US 2001-21368 20011212
US 7033746 B2	US 2001-21368 20011212
US 20060099630 A1 Div Ex	US 1995-467155 19950606
US 20060099630 A1 Cont of	US 1996-628198 19960405
US 20060099630 A1 Cont of	US 1998-201038 19981130
US 20060099630 A1 Div Ex	US 2000-605175 20000628
US 20060099630 A1 Div Ex	US 2001-21368 20011212
US 20060099630 A1	US 2005-292215 20051130

FILING DETAILS:

PATENT NO	KIND	PATENT NO
US 6153387	A Div ex	US 5736377 A
US 7033746	B2 Div ex	US 5736377 A
US 6153387	A Cont of	US 5843694 A
US 7033746	B2 Cont of	US 5843694 A
US 7033746	B2 Cont of	US 6153387 A
AU 9658009	A Based on	WO 9639175 A
US 20060099630	A1 Div ex	US 5736377 A
US 20060099630	A1 Cont of	US 5843694 A
US 20060099630	A1 Cont of	US 6153387 A

PRIORITY APPLN. INFO: US 1995-467155 19950606
 US 1996-628198 19960405
 US 1998-201038 19981130
 US 2000-605176 20000628
 US 2001-21368 20011212
 US 2000-605175 20000628
 US 2005-292215 20051130

INT. PATENT CLASSIF.:

IPC ORIGINAL: C07H0021-00 [I,C]; C07H0021-04 [I,A]; C07K0014-82 [I,A];
 C07K0014-82 [I,C]; C12P0021-06 [I,A]; C12P0021-06 [I,C];
 C12Q0001-00 [I,A]; C12Q0001-00 [I,C]; C12Q0001-68 [I,A];
 C12Q0001-68 [I,C]

IPC RECLASSIF.: C12N0009-64 [I,A]; C12N0009-64 [I,C]

ECLA: C12N0009-64F2C21

ICO: M12N0203:00; M12N0203:02; M12N0207:00; M12N0215:00

USCLASS NCLM: 424/094.630

NCLS: 435/069.100; 435/212.000; 435/219.000; 435/226.000;
 435/252.330; 435/254.110; 435/320.100; 435/325.000;
 530/350.000; 536/023.200; 536/023.500

BASIC ABSTRACT:

WO 1996039175 A1 UPAB: 20060112

Purified NES1 polypeptide (protease), is claimed. Also claimed are: (1) DNA encoding the NES1 polypeptide; (2) vector or cell comprising the DNA; and (3) antibody that specifically binds NES1 polypeptide.

USE - The NES1 polypeptide is a cell cycle-regulated serine protease, whose expression is negatively correlated with the presence of malignant epithelial cells, i.e. carcinomas. A decrease in NES1 expression provides a diagnostic marker for carcinomas, especially of breast, cervical or prostate tissue. The anti-NES1 polypeptide antibody, the NES1 polypeptide and wild-type NES1 DNA are used in the various diagnostic kits. An NES1-associated malignancy can be treated by gene therapy using the DNA encoding the NES1 polypeptide as a transgene. Alternatively, the polypeptide can be administered directly for inhibiting growth of the malignancy. Modulatory cpds., which are identified by their ability to increase NES1 expression, will be useful for treating diseases involving decreased expression of the NES1 gene. MANUAL CODE: CPI: B04-E03F; B04-E08; B04-G01;

Serial Number: 10/580,507

B04-L05C; B12-K04A1;

D05-C03C; D05-H11; D05-H12A; D05-H12E; D05-H17A3

Member(0003)

ABEQ US 5736377 A UPAB 20060112

Purified NES1 polypeptide (protease), is claimed. Also claimed are: (1) DNA encoding the NES1 polypeptide; (2) vector or cell comprising the DNA; and (3) antibody that specifically binds NES1 polypeptide.

USE - The NES1 polypeptide is a cell cycle-regulated serine protease, whose expression is negatively correlated with the presence of malignant epithelial cells, i.e. carcinomas. A decrease in NES1 expression provides a diagnostic marker for carcinomas, esp. of breast, cervical or prostate tissue. The anti-NES1 polypeptide antibody, the NES1 polypeptide and wild-type NES1 DNA are used in the various diagnostic kits. An NES1-associated malignancy can be treated by gene therapy using the DNA encoding the NES1 polypeptide as a transgene. Alternatively, the polypeptide can be administered directly for inhibiting growth of the malignancy. Modulatory cpds., which are identified by their ability to increase NES1 expression, will be useful for treating diseases involving decreased expression of the NES1 gene.

Member(0004)

ABEQ US 5843694 A UPAB 20060112

Purified NES1 polypeptide (protease), is claimed. Also claimed are: (1) DNA encoding the NES1 polypeptide; (2) vector or cell comprising the DNA; and (3) antibody that specifically binds NES1 polypeptide.

USE - The NES1 polypeptide is a cell cycle-regulated serine protease, whose expression is negatively correlated with the presence of malignant epithelial cells, i.e. carcinomas. A decrease in NES1 expression provides a diagnostic marker for carcinomas, esp. of breast, cervical or prostate tissue. The anti-NES1 polypeptide antibody, the NES1 polypeptide and wild-type NES1 DNA are used in the various diagnostic kits. An NES1-associated malignancy can be treated by gene therapy using the DNA encoding the NES1 polypeptide as a transgene. Alternatively, the polypeptide can be administered directly for inhibiting growth of the malignancy. Modulatory cpds., which are identified by their ability to increase NES1 expression, will be useful for treating diseases involving decreased expression of the NES1 gene.

Member(0005)

ABEQ US 6153387 A UPAB 20060112

Purified NES1 polypeptide (protease), is claimed. Also claimed are: (1) DNA encoding the NES1 polypeptide; (2) vector or cell comprising the DNA; and (3) antibody that specifically binds NES1 polypeptide.

USE - The NES1 polypeptide is a cell cycle-regulated serine protease, whose expression is negatively correlated with the presence of malignant epithelial cells, i.e. carcinomas. A decrease in NES1 expression provides a diagnostic marker for carcinomas, esp. of breast, cervical or prostate tissue. The anti-NES1 polypeptide antibody, the NES1 polypeptide and wild-type NES1 DNA are used in the various diagnostic kits. An NES1-associated malignancy can be treated by gene therapy using the DNA encoding the NES1 polypeptide as a transgene. Alternatively, the polypeptide can be administered directly for inhibiting growth of the malignancy. Modulatory cpds., which are identified by their ability to increase NES1 expression, will be useful for treating diseases involving decreased expression of the NES1 gene.

Serial Number: 10/580,507

L615 ANSWER 52 OF 52 WPIX COPYRIGHT 2008 THOMSON REUTERS on STN
ACCESSION NUMBER: 1986-298346 [45] WPIX
DOC. NO. CPI: C1986-129403 [21]
TITLE: Continuous hybrid cell line ATCC-HB8563 - produces
antibodies to HeLa cervical cancer
cells, useful in diagnosis, immuno:therapy, etc.
DERWENT CLASS: B04; D16
INVENTOR: CHAN T S
PATENT ASSIGNEE: (TEXA-C) UNIV OF TEXAS SYSTE
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
US 4618585	A	19861021	(198645)*	EN	4[0]	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 4618585 A		US 1982-359514	19820318
US 4618585 A		US 1984-631252	19840716

PRIORITY APPLN. INFO: US 1984-631252 19840716
INT. PATENT CLASSIF.:
IPC RECLASSIF.: A61K0038-00 [N,A]; A61K0038-00 [N,C]; C07K0016-18 [I,C];
C07K0016-30 [I,A]
ECLA: C07K0016-30
ICO: K61K0038:00; M07K0203:00; M07K0209:00
USCLASS NCLM: 424/155.100
NCLS: 435/070.210; 435/344.000

BASIC ABSTRACT:

US 4618585 A UPAB: 20050426
Continuous hybrid cell line, ATCC HB8563, and clones, producing
monoclonal antibody to an antigenic determinant unique to HeLa cervical cancer
cells, and the obtd. monoclonal antibodies, are new.

Conventionally obtd. antibody-producing mammalian cells, pref. immune
lymphoid cells, are fused with mycloma, plasmacytoma or hybridoma cells to
generate a cell line which can be cultivated indefinitely and which produces
large quantities of monoclonal antibodies.

Pref. lymphoid cells are lymphocytes and their normal differentiated
progeny, either from lymph node tissue or especially spleen tissue of
immunised animals. Mycloma cells may be antibody-producing or lacking in
antibody synthesis activity and are pref. plasmacytoma cells. The lymphoid and
mycloma cells are typically from the same species, giving isogenic hybridoma
which may be cultured in vivo in the form of ascites or a solid tumour, or in
vitro in a suitable medium.

Fusion is by known techniques, followed by screening for antibody
production Inclusion of a small amount of deoxycytidine in the hybridoma
tissue culture medium enhances the viability of the hybridoma and subsequent
antibody yield.

USE - Useful in research, e.g. to identify antigens associated with
cervical cancer cells as distinguished from antigens expressed by normal cervical
cells, and in diagnosis after tagging antibodies with a fluorescent or radioactive
tracer. The antibodies can also be used in immunotherapeutic techniques involving
the specific and selective destruction of cancer cells in vivo by targetting
cytotoxic agents, and as affinity binding agents for extraction and purificn. of
cervical cancer associated antigens. MANUAL CODE: CPI: B04-B04A3; B04-
B04C5; B11-C07A; B12-K04A1; D05-H01

Serial Number: 10/580,507

Author Search

=> FILE HCAPLUS

FILE 'HCAPLUS' ENTERED AT 12:27:05 ON 18 NOV 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 18 Nov 2008 VOL 149 ISS 21
FILE LAST UPDATED: 17 Nov 2008 (20081117/ED)

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> D QUE L583

L561(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	PACLITAXEL/CN
L562(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	DOXORUBICIN/CN
L563(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	EPIRUBICIN/CN
L564(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	IRINOTECAN/CN
L565(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	VINBLASTINE/CN
L566(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	METHOTREXATE/CN
L567(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	CISPLATIN/CN
L568(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	VALSPODAR/CN
L569(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	CYCLOPHOSPHAMIDE/CN
L570(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	MITOXANTRONE/CN
L571(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	TOPOTECAN/CN
L572(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	BISANTRENE/CN
L573(	12)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	(L561 OR L562 OR L563 OR L564 OR L565 OR L566 OR L567 OR L568 OR L569 OR L570 OR L571 OR L572)
L574(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	5-FLUOROURACIL/CN
L575(	13)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	L573 OR L574
L576(	92104)SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	L575
L577(	32)SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	PARISSENTI A?/AU
L578(	2209)SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	GUO, B?/AU
L579(	401)SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	VILLENEUVE, D?/AU
L580(	7)SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	HEMBRUFF S?/AU
L581(	2625)SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	(L577 OR L578 OR L579 OR L580)
L582(	20)SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	L576 AND L581
L583	12	SEA	FILE=HCAPLUS	ABB=ON	PLU=ON L582 AND (PRY<=2004 OR AY<=2004 OR PY<=2004)

Serial Number: 10/580,507

=> S L583 NOT L450
L616 10 L583 NOT L450

=> FILE MEDLINE

FILE 'MEDLINE' ENTERED AT 12:28:59 ON 18 NOV 2008

FILE LAST UPDATED: 15 Nov 2008 (20081115/UP). FILE COVERS 1949 TO DATE.

MEDLINE has been updated with the National Library of Medicine's revised 2008 MeSH terms. See HELP RLOAD for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

See HELP RANGE before carrying out any RANGE search.

MEDLINE Accession Numbers (ANs) for records from 1950-1977 have been converted from 8 to 10 digits. Searches using an 8 or 10 digit AN will retrieve the same record. The 10-digit ANs can be expanded, searched, and displayed in all records from 1949 to the present.

=> D QUE L605

L584(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	PACLITAXEL/CN
L585(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	DOXORUBICIN/CN
L586(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	EPIRUBICIN/CN
L587(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	5-FLUOROURACIL/CN
L588(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	IRINOTECAN/CN
L589(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	VINBLASTINE/CN
L590(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	VINBLASTIN/CN
L591(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	METHOTREXATE/CN
L592(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	CISPLATIN/CN
L593(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	VALSPODAR/CN
L594(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	CYCLOPHOSPHAMIDE/CN
L595(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	MITOXANTRONE/CN
L596(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	TOPOTECAN/CN
L597(	1)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	BISANTRENE/CN
L598(	13)SEA	FILE=REGISTRY	ABB=ON	PLU=ON	(L584 OR L585 OR L586 OR L587 OR L588 OR L589 OR L590 OR L591 OR L592 OR L593 OR L594 OR L595 OR L596 OR L597)
L599(	138826)	SEA	FILE=MEDLINE	ABB=ON	PLU=ON L598
L600(	27)	SEA	FILE=MEDLINE	ABB=ON	PLU=ON PARISSENTI A?/AU
L601(	399)	SEA	FILE=MEDLINE	ABB=ON	PLU=ON GUO, B?/AU
L602(	234)	SEA	FILE=MEDLINE	ABB=ON	PLU=ON VILLENEUVE, D?/AU
L603(	6)	SEA	FILE=MEDLINE	ABB=ON	PLU=ON HEMBRUFF S?/AU
L604(	645)	SEA	FILE=MEDLINE	ABB=ON	PLU=ON (L600 OR L601 OR L602 OR L603)
L605	8	SEA	FILE=MEDLINE	ABB=ON	PLU=ON L599 AND L604

=> S L605 NOT L139
L617 6 L605 NOT L139

Serial Number: 10/580,507

=> FILE BIOSIS

FILE 'BIOSIS' ENTERED AT 12:31:42 ON 18 NOV 2008

Copyright (c) 2008 The Thomson Corporation

FILE COVERS 1926 TO DATE.

CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT

FROM JANUARY 1926 TO DATE.

RECORDS LAST ADDED: 13 November 2008 (20081113/ED)

BIOSIS has been augmented with 1.8 million archival records from 1926 through 1968. These records have been re-indexed to match current BIOSIS indexing.

=> D QUE L472

```
L451(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  PACLITAXEL/CN
L452(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  DOXORUBICIN/CN
L453(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  EPIRUBICIN/CN
L454(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  5-FLUOROURACIL/CN
L455(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  IRINOTECAN/CN
L456(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  VINBLASTINE/CN
L457(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  VINBLASTIN/CN
L458(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  METHOTREXATE/CN
L459(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  CISPLATIN/CN
L460(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  VALSPODAR/CN
L461(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  CYCLOPHOSPHAMIDE/CN
L462(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  MITOXANTRONE/CN
L463(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  TOPOTECAN/CN
L464(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  BISANTRENE/CN
L465(     13)SEA FILE=REGISTRY ABB=ON  PLU=ON  (L451 OR L452 OR L453 OR
      L454 OR L455 OR L456 OR L457 OR L458 OR L459 OR L460 OR L461
      OR L462 OR L463 OR L464)
L466(    163678)SEA FILE=BIOSIS ABB=ON  PLU=ON  L465
L467(      35)SEA FILE=BIOSIS ABB=ON  PLU=ON  PARISENTI A?/AU
L468(     499)SEA FILE=BIOSIS ABB=ON  PLU=ON  GUO, B?/AU
L469(     268)SEA FILE=BIOSIS ABB=ON  PLU=ON  VILLENEUVE D?/AU
L470(      11)SEA FILE=BIOSIS ABB=ON  PLU=ON  HEMBRUFF  S?/AU
L471(     780)SEA FILE=BIOSIS ABB=ON  PLU=ON  (L467 OR L468 OR L469 OR L470)

L472      23 SEA FILE=BIOSIS ABB=ON  PLU=ON  L466 AND L471
```

=> S L472 NOT L326

L618 21 L472 NOT L326

=> FILE EMBASE

FILE 'EMBASE' ENTERED AT 12:32:17 ON 18 NOV 2008

Copyright (c) 2008 Elsevier B.V. All rights reserved.

FILE COVERS 1974 TO 18 Nov 2008 (20081118/ED)

EMBASE was reloaded on March 30, 2008.

EMBASE is now updated daily. SDI frequency remains weekly (default) and biweekly.

This file contains CAS Registry Numbers for easy and accurate substance identification.

Serial Number: 10/580,507

Beginning January 2008, Elsevier will no longer provide EMTREE codes as part of the EMTREE thesaurus in EMBASE. Please update your current-awareness alerts (SDIs) if they contain EMTREE codes.

For further assistance, please contact your local helpdesk.

=> D QUE L560

```
L473(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  PACLITAXEL/CN
L474(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  DOXORUBICIN/CN
L475(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  EPIRUBICIN/CN
L476(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  5-FLUOROURACIL/CN
L477(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  IRINOTECAN/CN
L478(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  VINBLASTINE/CN
L479(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  VINBLASTIN/CN
L480(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  METHOTREXATE/CN
L481(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  CISPLATIN/CN
L482(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  VALSPODAR/CN
L483(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  CYCLOPHOSPHAMIDE/CN
L484(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  MITOXANTRONE/CN
L485(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  TOPOTECAN/CN
L486(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  BISANTRENE/CN
L487(     13)SEA FILE=REGISTRY ABB=ON  PLU=ON  (L473 OR L474 OR L475 OR
      L476 OR L477 OR L478 OR L479 OR L480 OR L481 OR L482 OR L483
      OR L484 OR L485 OR L486)
L488(    288235)SEA FILE=EMBASE ABB=ON  PLU=ON  L487
L489(      927)SEA FILE=EMBASE ABB=ON  PLU=ON  (ISOGENIC OR ISOGENEIC) (7A)CELL

L490(    139079)SEA FILE=EMBASE ABB=ON  PLU=ON  DRUG RESISTANCE+NT/CT
L491(   1576209)SEA FILE=EMBASE ABB=ON  PLU=ON  NEOPLASM+NT/CT
L492(      89)SEA FILE=EMBASE ABB=ON  PLU=ON  L488 AND L489
L493(     16)SEA FILE=EMBASE ABB=ON  PLU=ON  L492 AND L490
L494(     13)SEA FILE=EMBASE ABB=ON  PLU=ON  L493 AND L491
L495(      9)SEA FILE=EMBASE ABB=ON  PLU=ON  L494 AND PY<=2004
L496(      3)SEA FILE=EMBASE ABB=ON  PLU=ON  L495 AND (RECENT OR UROEPITHELI
      AL OR LOSS)/TI
L497(   158539)SEA FILE=EMBASE ABB=ON  PLU=ON  (BREAST OR MAMMARY) (2A)
      (NEOPLASM OR CANCER OR TUMOR OR CYST)
L498(    35856)SEA FILE=EMBASE ABB=ON  PLU=ON  (UTERINE OR ENDOMETRIAL OR
      CERVICAL) (2A) (NEOPLASM OR CANCER OR TUMOR OR CYST)
L499(   164648)SEA FILE=EMBASE ABB=ON  PLU=ON  ANTITUMOR OR ANTICANCER OR
      ANTINEOPLASTIC
L500(      927)SEA FILE=EMBASE ABB=ON  PLU=ON  (ISOGENIC OR ISOGENEIC) (7A)CELL

L501(      61)SEA FILE=EMBASE ABB=ON  PLU=ON  L500 AND (L497 OR L498)
L502(      8)SEA FILE=EMBASE ABB=ON  PLU=ON  L501 AND L499
L503(      3)SEA FILE=EMBASE ABB=ON  PLU=ON  L502 NOT (PTEN OR NOVEL OR
      CHALCONE OR TACHPYRIDINE OR ENFORCED OR FLAVOPIRIDOL)
L504(      2)SEA FILE=EMBASE ABB=ON  PLU=ON  L503 NOT RH1
L505(      5)SEA FILE=EMBASE ABB=ON  PLU=ON  L496 OR L504
L506(     27)SEA FILE=EMBASE ABB=ON  PLU=ON  PARISENTI A?/AU
L507(    302)SEA FILE=EMBASE ABB=ON  PLU=ON  GUO B?/AU
L508(    199)SEA FILE=EMBASE ABB=ON  PLU=ON  VILLENEUVE D?/AU
L509(      6)SEA FILE=EMBASE ABB=ON  PLU=ON  HEMBRUFF S?/AU
L510(    513)SEA FILE=EMBASE ABB=ON  PLU=ON  (L506 OR L507 OR L508 OR L509)

L511(    31865)SEA FILE=EMBASE ABB=ON  PLU=ON  PACLITAXEL OR ANZATAX OR
      NSC-125973 OR PAXENE OR PRAXEL OR TAXOL OR TAXOL A
L512(    89667)SEA FILE=EMBASE ABB=ON  PLU=ON  DOXORUBICIN OR ADRIABLASTIN OR
      ADRIABLASTINE OR ADRIAMYCIN OR ADRIBLASTIN OR ADRIBLASTINA OR
```

Serial Number: 10/580,507

ADRIBLASTINE OR ADRIMEDAC OR CAELYX OR DOX SL OR DOXIL OR DOXO
CELL

L513(662)SEA FILE=EMBASE ABB=ON PLU=ON DOXOLEM OR (DOXORUBICIN (2A)
(HEXAL OR NC OR HYDROCHLORIDE)) OR (DOXORUBICINA (2A)(FERRER
FARM OR FUNK OR TEDEC)) OR DOXOTEC OR FARMIBLASTINA OR MYOCET
OR ONKODOX OR RIBODOXO OR RIBOSEPHARM OR RUBEX

L514(89699)SEA FILE=EMBASE ABB=ON PLU=ON L512 OR L513

L515(13129)SEA FILE=EMBASE ABB=ON PLU=ON EPIRUBICIN OR (EPI (2A)
(ADRIAMYCIN OR DOXORUBICIN OR DXR)) OR EPIADRIAMYCIN OR
EPIDOXORUBICIN OR ELLENCE OR EPILEM OR EPIRUBICIN HYDROCHLORIDE
OR FARMORUBICIN OR FARMORUBICINA OR FARMORUBICINE OR NSC-25694
2 OR PHARMORUBICIN

L516(65984)SEA FILE=EMBASE ABB=ON PLU=ON FLUOROURACIL OR FLUOROURACIL-BI
OSYN OR ADRUCIL OR CARAC OR EFUDEX OR EFUDIX OR FLUOROPLEX OR
(FLUOROURACIL (2A)(MONONITRATE OR (MONOPOTASSIUM OR MONOSODIUM
OR POTASSIUM) (A) SALT))

L517(10992)SEA FILE=EMBASE ABB=ON PLU=ON IRINOTECAN OR CAMPTOSAR OR
CAMPTOTHECIN 11 OR IRINOTECAN HYDROCHLORIDE OR IRRINOTECAN OR
SN 38 OR SN 38 11

L518(24507)SEA FILE=EMBASE ABB=ON PLU=ON VINBLASTINE OR CELLBLASTIN OR
VINBLASTINE SULFATE OR VELBAN OR VELBE OR VINBLASTIN HEXAL OR
VINBLASTINA LILLY

L519(84300)SEA FILE=EMBASE ABB=ON PLU=ON METHOTREXATE OR AMETHOPTERIN
OR (METHOTREXATE (2A) (HYDRATE OR (DICESIUM OR DISODIUM OR
SODIUM) (A) SALT)) OR MEXATE

L520(76081)SEA FILE=EMBASE ABB=ON PLU=ON CISPLATIN OR BIOCISPLATINUM OR
CIS PLATINUM DICHLORODIAMMINEPLATINUM OR NSC-119875 OR
PLATIDIAM OR PLATINO OR PLATINOL OR PLATINUM DIAMMINODICHLORIDE

L521(1139)SEA FILE=EMBASE ABB=ON PLU=ON VALSPODAR OR PSC 833 OR PSC833

L522(113382)SEA FILE=EMBASE ABB=ON PLU=ON CYCLOPHOSPHAMIDE OR CYCLOPHOSPH
AMIDE MONOHYDRATE OR CYCLOPHOSPHANE OR CYTOPHOSPHAN OR CYTOXAN
OR ENDOXAN OR NEOSAR OR NSC-26271 OR PROCYTOX OR SENDOXAN

L523(12592)SEA FILE=EMBASE ABB=ON PLU=ON MITOXANTRONE OR MITOXANTRONE
(2A)(HYDROCHLORIDE OR ACETATE) OR MITOZANTRONE ORMITROXONE OR
NOVANTRON OR NOVANTRONE OR NSC 279836 OR NSC 287836 OR NSC
299195 NSC 301739 OR NSC 301739D

L524(5090)SEA FILE=EMBASE ABB=ON PLU=ON TOPOTECAN OR HYCANTAMINE OR
HYCANTIN OR NOGITECAN HYDROCHLORIDE OR NSC-609699 OR TOPOTECAN
HYDROCHLORIDE

L525(400)SEA FILE=EMBASE ABB=ON PLU=ON BISANTRENE OR BISANTRENE
DIHYDROCHLORIDE OR CL 216942 OR CL216 942 OR NSC 337766

L526(300548)SEA FILE=EMBASE ABB=ON PLU=ON (L511 OR L514 OR L515 OR L516
OR L517 OR L518 OR L519 OR L520 OR L521 OR L522 OR L523 OR
L524 OR L525)

L527(100)SEA FILE=EMBASE ABB=ON PLU=ON L500 AND L526

L528(139123)SEA FILE=EMBASE ABB=ON PLU=ON DRUG RESISTANCE+NT/CT

L529(17)SEA FILE=EMBASE ABB=ON PLU=ON L527 AND L528

L530(12)SEA FILE=EMBASE ABB=ON PLU=ON L529 AND PY<=2004

L531(3)SEA FILE=EMBASE ABB=ON PLU=ON L530 AND (L497 OR L498)

L532(6)SEA FILE=EMBASE ABB=ON PLU=ON L505 OR L531

L533(17)SEA FILE=EMBASE ABB=ON PLU=ON L510 AND L526

L534(15)SEA FILE=EMBASE ABB=ON PLU=ON L533 NOT L529

L535(3)SEA FILE=EMBASE ABB=ON PLU=ON L534 AND L528

L536(3)SEA FILE=EMBASE ABB=ON PLU=ON L535 NOT L532

L537(2)SEA FILE=EMBASE ABB=ON PLU=ON L536 NOT REVERSAL

L538(27)SEA FILE=EMBASE ABB=ON PLU=ON PARISENTI A?/AU

L539(302)SEA FILE=EMBASE ABB=ON PLU=ON GUO B?/AU

L540(199)SEA FILE=EMBASE ABB=ON PLU=ON VILLENEUVE D?/AU

Serial Number: 10/580,507

L541(6)SEA FILE=EMBASE ABB=ON PLU=ON HEMBRUFF S?/AU
L542(513)SEA FILE=EMBASE ABB=ON PLU=ON (L538 OR L539 OR L540 OR L541)

L543(31865)SEA FILE=EMBASE ABB=ON PLU=ON PACLITAXEL OR ANZATAX OR
NSC-125973 OR PAXENE OR PRAXEL OR TAXOL OR TAXOL A
L544(89667)SEA FILE=EMBASE ABB=ON PLU=ON DOXORUBICIN OR ADRIABLASTIN OR
ADRIABLASTINE OR ADRIAMYCIN OR ADRIBLASTIN OR ADRIBLASTINA OR
ADRIBLASTINE OR ADRIMEDAC OR CAELYX OR DOX SL OR DOXIL OR DOXO
CELL
L545(662)SEA FILE=EMBASE ABB=ON PLU=ON DOXOLEM OR (DOXORUBICIN (2A)
(HEXAL OR NC OR HYDROCHLORIDE)) OR (DOXORUBICINA (2A)(FERRER
FARM OR FUNK OR TEDEC)) OR DOXOTEC OR FARMIBLASTINA OR MYOCET
OR ONKODOX OR RIBODOXO OR RIBOSEPHARM OR RUBEX
L546(89699)SEA FILE=EMBASE ABB=ON PLU=ON L544 OR L545
L547(13129)SEA FILE=EMBASE ABB=ON PLU=ON EPIRUBICIN OR (EPI (2A)
(ADRIAMYCIN OR DOXORUBICIN OR DXR)) OR EPIADRIAMYCIN OR
EPIDOXORUBICIN OR ELLENCE OR EPILEM OR EPIRUBICIN HYDROCHLORIDE
OR FARMORUBICIN OR FARMORUBICINA OR FARMORUBICINE OR NSC-25694
2 OR PHARMORUBICIN
L548(65984)SEA FILE=EMBASE ABB=ON PLU=ON FLUOROURACIL OR FLUOROURACIL-BI
OSYN OR ADRUCIL OR CARAC OR EFUDEX OR EFUDIX OR FLUOROPLEX OR
(FLUOROURACIL (2A)(MONONITRATE OR (MONOPOTASSIUM OR MONOSODIUM
OR POTASSIUM) (A) SALT))
L549(10992)SEA FILE=EMBASE ABB=ON PLU=ON IRINOTECAN OR CAMPTOSAR OR
CAMPTOTHECIN 11 OR IRINOTECAN HYDROCHLORIDE OR IRRINOTECAN OR
SN 38 OR SN 38 11
L550(24507)SEA FILE=EMBASE ABB=ON PLU=ON VINBLASTINE OR CELLBLASTIN OR
VINBLASTINE SULFATE OR VELBAN OR VELBE OR VINBLASTIN HEXAL OR
VINBLASTINA LILLY
L551(84300)SEA FILE=EMBASE ABB=ON PLU=ON METHOTREXATE OR AMETHOPTERIN
OR (METHOTREXATE (2A) (HYDRATE OR (DICESIUM OR DISODIUM OR
SODIUM) (A) SALT)) OR MEXATE
L552(76081)SEA FILE=EMBASE ABB=ON PLU=ON CISPLATIN OR BIOCISPLATINUM OR
CIS PLATINUM DICHLORODIAMMINEPLATINUM OR NSC-119875 OR
PLATIDIAM OR PLATINO OR PLATINOL OR PLATINUM DIAMMINODICHLORIDE

L553(1139)SEA FILE=EMBASE ABB=ON PLU=ON VALSPODAR OR PSC 833 OR PSC833

L554(113382)SEA FILE=EMBASE ABB=ON PLU=ON CYCLOPHOSPHAMIDE OR CYCLOPHOSPH
AMIDE MONOHYDRATE OR CYCLOPHOSPHANE OR CYTOPHOSPHAN OR CYTOXAN
OR ENDOXAN OR NEOSAR OR NSC-26271 OR PROCYTOX OR SENDOXAN
L555(12592)SEA FILE=EMBASE ABB=ON PLU=ON MITOXANTRONE OR MITOXANTRONE
(2A) (HYDROCHLORIDE OR ACETATE) OR MITOZANTRONE OR MITROXONE OR
NOVANTRON OR NOVANTRONE OR NSC 279836 OR NSC 287836 OR NSC
299195 NSC 301739 OR NSC 301739D
L556(5090)SEA FILE=EMBASE ABB=ON PLU=ON TOPOTECAN OR HYCANTAMINE OR
HYCANTIN OR NOGITECAN HYDROCHLORIDE OR NSC-609699 OR TOPOTECAN
HYDROCHLORIDE
L557(400)SEA FILE=EMBASE ABB=ON PLU=ON BISANTRENE OR BISANTRENE
DIHYDROCHLORIDE OR CL 216942 OR CL216 942 OR NSC 337766
L558(300548)SEA FILE=EMBASE ABB=ON PLU=ON (L543 OR L546 OR L547 OR L548
OR L549 OR L550 OR L551 OR L552 OR L553 OR L554 OR L555 OR
L556 OR L557)
L559 17 SEA FILE=EMBASE ABB=ON PLU=ON L542 AND L558
L560 17 SEA FILE=EMBASE ABB=ON PLU=ON L537 OR L559

=> S L560 NOT L406

L619 16 L560 NOT L406

Serial Number: 10/580,507

=> FILE WPIX

FILE 'WPIX' ENTERED AT 12:33:02 ON 18 NOV 2008
COPYRIGHT (C) 2008 THOMSON REUTERS

FILE LAST UPDATED: 12 NOV 2008 <20081112/UP>
MOST RECENT UPDATE: 200873 <200873/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE
>>> Now containing more than 1.2 million chemical structures in DCR <<<

>>> IPC Reform backfile reclassifications have been loaded to end of
September 2008. No update date (UP) has been created for the
reclassified documents, but they can be identified by 20060101/UPIC,
and 20061231/UPIC, 20070601/UPIC, 20071001/UPIC, 20071130/UPIC,
20080401/UPIC, 20080701/UPIC and 20081001/UPIC.
ECLA reclassifications to mid August and US national classification
mid September 2008 have also been loaded. Update dates 20080401,
20080701 and 20081001/UPEC and /UPNC have been assigned to these. <<

FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE,
PLEASE VISIT:
http://www.stn-international.de/training_center/patents/stn_guide.pdf

FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE
<http://scientific.thomsonreuters.com/support/patents/coverage/latestupdates/>

EXPLORE DERWENT WORLD PATENTS INDEX IN STN ANAVIST, VERSION 2.0:
http://www.stn-international.com/archive/presentations/DWPIAnaVist2_0608.pdf

>>> HELP for European Patent Classifications see HELP ECLA, HELP ICO <<<

=> D QUE L614

L606(3269)SEA FILE=WPIX ABB=ON PLU=ON PACLITAXEL
L607(3244)SEA FILE=WPIX ABB=ON PLU=ON DOXORUBICIN
L608(10953)SEA FILE=WPIX ABB=ON PLU=ON L606 OR L607 OR EPIRUBICIN OR
5-FLUOROURACIL OR IRINOTECAN OR VINBLASTINE OR VINBLASTIN OR
METHOTREXATE OR CISPLATIN OR CISPLATINE OR VALSPODAR OR
CYCLOPHOSPHAMIDE OR MITOXANTRONE OR TOPOTECAN OR BISANTRENE
L609(3)SEA FILE=WPIX ABB=ON PLU=ON PARISSENTI A?/AU
L610(706)SEA FILE=WPIX ABB=ON PLU=ON GUO, B?/AU
L611(5)SEA FILE=WPIX ABB=ON PLU=ON VILLENEUVE D?/AU
L612(1)SEA FILE=WPIX ABB=ON PLU=ON HEMBRUFF S?/AU
L613(712)SEA FILE=WPIX ABB=ON PLU=ON (L609 OR L610 OR L611 OR L612)
L614 2 SEA FILE=WPIX ABB=ON PLU=ON L608 AND L613

=> S L614 NOT L449

L620 1 L614 NOT L449

=> DUP REMOVE L616 L617 L618 L619 L620

FILE 'HCAPLUS' ENTERED AT 12:33:56 ON 18 NOV 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'MEDLINE' ENTERED AT 12:33:56 ON 18 NOV 2008

FILE 'BIOSIS' ENTERED AT 12:33:56 ON 18 NOV 2008
Copyright (c) 2008 The Thomson Corporation

Serial Number: 10/580,507

FILE 'EMBASE' ENTERED AT 12:33:56 ON 18 NOV 2008
Copyright (c) 2008 Elsevier B.V. All rights reserved.

FILE 'WPIX' ENTERED AT 12:33:56 ON 18 NOV 2008
COPYRIGHT (C) 2008 THOMSON REUTERS
L621 33 DUP REMOVE L616 L617 L618 L619 L620 (21 DUPLICATES REMOVED)

L621 ANSWER 1 OF 33 HCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 5
ACCESSION NUMBER: 2005:450924 HCAPLUS Full-text
DOCUMENT NUMBER: 142:457064
TITLE: Use of calphostin C to treat drug-resistant tumor cells
INVENTOR(S): Farissenti, Amadeo
PATENT ASSIGNEE(S): Can.
SOURCE: U.S. Pat. Appl. Publ., 21 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
US 20050113320	A1	20050526	US 2004-974310	20041027 <--
US 7371780	B2	20080513		
CA 2479696	A1	20050511	CA 2004-2479696	20040831 <--
PRIORITY APPLN. INFO.:			US 2003-519057P	P 20031111 <--

ED Entered STN: 27 May 2005

AB Calphostin C is used to treat subjects for cancer which is resistant to treatment by other forms of chemotherapeutic drugs, for example breast or uterine cancer, or other cancers characterized by tumor cells that have a defect in an apoptotic regulatory pathway which renders said cells resistant to at least some other forms of chemotherapeutic treatment. The other chemotherapeutic drug used with calphostin C is selected from the group comprising taxanes and anthracyclines, such as paclitaxel or doxorubicin. The use may take the form of administering calphostin C and then subjecting the patient to photodynamic therapy (PDT). Calphostin C effectively killed both MCF-7 cells and MCF-7 cells resistant to paclitaxel and doxorubicin.

REFERENCE COUNT: 78 THERE ARE 78 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L621 ANSWER 2 OF 33 HCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 6
ACCESSION NUMBER: 2004:438844 HCAPLUS Full-text
DOCUMENT NUMBER: 142:32515
TITLE: Evaluation of sICAM-1, sVCAM-1, and sE-Selectin Levels in Patients with Metastatic Breast Cancer Receiving High-Dose Chemotherapy
AUTHOR(S): Bewick, M.; Conlon, M.; Lee, H.; Farissenti, A. M.; Zhang, L.; Glueck, S.; Lafrenie, R. M.
CORPORATE SOURCE: Northeastern Ontario Regional Cancer Centre, Sudbury, ON, P3E 5J1, Can.
SOURCE: Stem Cells and Development (2004), 13(3), 281-294
CODEN: SCDTAE; ISSN: 1547-3287
PUBLISHER: Mary Ann Liebert, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 01 Jun 2004

AB Soluble forms of some cell adhesion mols. (CAM), sICAM-1, sVCAM-1, and sE-selectin, are elevated in the sera and plasma of patients with inflammation, arthritis, diabetes, and cancer. Increased levels of these soluble mols. in patients with cancer have been shown to correlate with disease progression and survival. This suggests that increased expression of the soluble forms of CAMs may play an important role in cancer cell growth and metastasis and may be prognostic and/or predictive of malignant disease. In this retrospective study, we assessed the clin. significance of sICAM-1, sVCAM-1, and sE-selectin in 95 patients with metastatic breast cancer enrolled in clin. trials of high-dose chemotherapy (HDC) and autologous stem cell transplantation (ASCT). The significance of soluble HER-2 (sHER-2) and sFAS status, determined in previous studies for this group of patients, was also included in this anal. Univariate anal. showed that sICAM-1, sVCAM-1, sFas, sHER-2 pos. status, and the presence of liver metastases were significant prognostic factors for both progression-free survival (PFS) and overall survival (OS) in the total patient group. In multivariable anal., HER-2 and sFAS were shown to be independent prognostic factors for PFS and OS. Within the various treatment groups examined, sICAM-1 was a prognostic factor for clin. outcome for patients with metastatic breast cancer enrolled in trials with cyclophosphamide- and carboplatin-based or vinblastine-based HDC, but not in trials with paclitaxel and cyclophosphamide-based HDC.

L621 ANSWER 3 OF 33 HCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 7

ACCESSION NUMBER: 2003:904318 HCAPLUS Full-text

DOCUMENT NUMBER: 140:399445

TITLE: Potent Killing of Paclitaxel- and Doxorubicin-resistant Breast Cancer Cells by Calphostin C Accompanied by Cytoplasmic Vacuolization

AUTHOR(S): Guo, Baoqing; Hembruff, Stacey L.; Villeneuve, David J.; Kirwan, Angie F.; Farissenti, Amadeo M.

CORPORATE SOURCE: Tumor Biology Research Program, Northeastern Ontario Regional Cancer Centre, Sudbury, ON, Can.

SOURCE: Breast Cancer Research and Treatment (2003), 82(2), 125-141

CODEN: BCTRD6; ISSN: 0167-6806

PUBLISHER: Kluwer Academic Publishers

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 19 Nov 2003

AB Drug resistance is a major impediment to the successful treatment of breast cancer using chemotherapy. The photoactivatable drug calphostin C has shown promise in killing select drug-resistant tumor cells lines in vitro. To assess the effectiveness of this agent in killing doxorubicin- or paclitaxel-resistant breast tumor cells and to explore its mode of action, MCF-7 cells were exposed to increasing concns. of either doxorubicin or paclitaxel until maximum resistance was obtained. This resulted in the creation of isogenic drug-resistant MCF-7TAX and MCF-7DOX cell lines, which were approx. 50- and 65-fold resistant to paclitaxel and doxorubicin, resp. Interestingly, calphostin C was able to kill MCF-7TAX cells as efficiently as wild-type MCF-7 cells (IC50s were 9.2 and 13.2 nM, resp.), while MCF-7DOX cells required a 5-fold higher concentration of calphostin C to achieve the same killing (IC50 = 64.2 nM). Consistent with their known mechanisms of action, paclitaxel killed tumor cells by inducing mitotic arrest and cell multinucleation, while doxorubicin induced plasma membrane blebbing and decreased nuclear staining with propidium iodide. In contrast, cytoplasmic vacuolization accompanied cell killing by calphostin C in these cell lines, without the induction of caspase-8 or PARP cleavage or the release of cytochrome c from mitochondria. Calphostin C had little effect on the uptake of either paclitaxel or

Serial Number: 10/580,507

doxorubicin by the cells. Taken together, the above data suggests that calphostin C is able to potently kill drug-resistant breast tumor cells through a mechanism that may involve the induction of cytoplasmic vacuolization, without activation of typical apoptotic pathways. Consequently, calphostin C may prove useful clin. to combat tumor growth in breast cancer patients whose tumors have become unresponsive to anthracyclines or taxanes, particularly in association with photodynamic therapy.

REFERENCE COUNT: 94 THERE ARE 94 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L621 ANSWER 4 OF 33 HCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 9

ACCESSION NUMBER: 2000:162761 HCAPLUS Full-text

DOCUMENT NUMBER: 133:53286

TITLE: Overexpression of Bax enhances antitumor activity of chemotherapeutic agents in human head and neck squamous cell carcinoma

AUTHOR(S): Guo, Bin; Cao, Shousong; Toth, Karoly; Azrak, Rami G.; Rustum, Youcef M.

CORPORATE SOURCE: Department of Pharmacology and Experimental Therapeutics, Grace Cancer Drug Center, Roswell Park Cancer Institute, Buffalo, NY, 14263, USA

SOURCE: Clinical Cancer Research (2000), 6(2), 718-724

CODEN: CCREF4; ISSN: 1078-0432

PUBLISHER: American Association for Cancer Research

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 12 Mar 2000

AB Overexpression of the Bax protein in human head and neck squamous cell carcinoma A253 cells was reported to result in an increased sensitivity to various chemotherapeutic agents in vitro. In the present study, the relationship between Bax expression and response to chemotherapy was further investigated in vitro in vivo model systems. For in vitro study, A253, A253/Vec (pcDNA3 vector transfectant), and A253/Bax (pcDNA3/Bax transfectant, expressing 50-fold higher Bax protein than A253 and A253/Vec) cells were exposed to various concns. of raltitrexed (a specific thymidylate synthase inhibitor) and SN-38 (a topoisomerase I inhibitor) for 2 h, and cell growth inhibition was assessed by 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyltetrazolium bromide clonogenic assay. Compared to A253/Vec, A253/Bax cells exhibited 9.5- and 13.8-fold increases in sensitivity to raltitrexed and SN-38, resp. For in vivo study, A253/Vec and A253/Bax tumor xenografts were established by s.c. injection of tumor cells into nude mice. The antitumor activity and toxicity of raltitrexed (i.v. push daily for 5 days) and irinotecan (a prodrug of SN-38; i.v. push daily for 3 days) were evaluated. The maximum tolerated doses of raltitrexed and irinotecan were 30 and 100 mg/kg/day, resp. At the maximum tolerated doses, minimal antitumor activity was observed with raltitrexed, although irinotecan was more active than raltitrexed against A253 or A253/Vec tumors. In contrast, both raltitrexed and irinotecan were more active against A253/Bax xenografts than against A253/Vec xenografts; the yield for complete tumor regression (cure) was 40% and 100% with raltitrexed and irinotecan, resp., with no significant toxicity. Furthermore, the observed increase of antitumor activity in A253/Bax tumors was associated with an enhanced induction of apoptosis in vivo. The in vivo results demonstrated a proof of the principal concept that selecting up-regulation of the proapoptosis gene Bax can provide the basis for a greater therapeutic efficacy to a variety of chemotherapeutic agents with different structures and mechanisms of action.

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

Serial Number: 10/580,507

L621 ANSWER 5 OF 33 HCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 10

ACCESSION NUMBER: 2000:384663 HCAPLUS Full-text

DOCUMENT NUMBER: 133:261217

TITLE: Role of specific apoptotic pathways in the restoration of paclitaxel-induced apoptosis by valspodar in doxorubicin-resistant MCF-7 breast cancer cells

AUTHOR(S): Chadderton, Antony; Villeneuve, David J.; Gluck, Stefan; Kirwan-Rhude, Angie F.; Gannon, Brian R.; Blais, David E.; Parissenti, Amadeo M.

CORPORATE SOURCE: Department of Research, Northeastern Ontario Regional Cancer Centre, Sudbury, ON, Can.

SOURCE: Breast Cancer Research and Treatment (2000), 59(3), 231-244

CODEN: BCTRD6; ISSN: 0167-6806

PUBLISHER: Kluwer Academic Publishers

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 09 Jun 2000

AB Paclitaxel (Taxol) kills tumor cells by inducing both cellular necrosis and apoptosis. A major impediment to paclitaxel cytotoxicity is the establishment of multidrug resistance whereby exposure to one chemotherapeutic agent results in cross-resistance to a wide variety of other drugs. For example, selection of MCF-7 breast cancer cells for resistance to doxorubicin (MCF-7ADR cells) results in cross-resistance to paclitaxel. This appears to involve the overexpression of the drug transporter P-glycoprotein which can efflux both drugs from tumor cells. However, MCF-7ADR cells possess a deletion mutation in p53 and have considerably reduced levels of the Fas receptor, Fas ligand, caspase-2, caspase-6, and caspase-8, suggesting that paclitaxel resistance may also stem from a bona fide block in paclitaxel-induced apoptosis in these cells. To address this issue, we examined the ability of the P-glycoprotein inhibitor valspodar to restore paclitaxel accumulation, paclitaxel cytotoxicity, and paclitaxel-induced apoptosis. Compared to drug sensitive MCF-7 cells, MCF-7ADR cells accumulated >6-fold less paclitaxel, were approx. 100-fold more resistant to killing by the drug, and were highly resistant to paclitaxel-induced apoptosis. In contrast, MCF-7ADR cells pretreated with valspodar were indistinguishable from drug-sensitive cells in their ability to accumulate paclitaxel, in their chemosensitivity to the drug, and in their ability to undergo paclitaxel-induced apoptosis. Valspodar, by itself, did not affect these parameters. This suggests that the enhancement of paclitaxel toxicity in MCF-7ADR cells involves a restoration of apoptosis and not solely through enhanced drug-induced necrosis. Moreover, it appears that changes in the levels/activity of p53, the Fas receptor, Fas ligand, caspase-2, caspase-6, or caspase-8 activity have little effect on paclitaxel-induced cytotoxicity and apoptosis in human breast cancer cells.

REFERENCE COUNT: 53 THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L621 ANSWER 6 OF 33 HCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 11

ACCESSION NUMBER: 1999:586201 HCAPLUS Full-text

DOCUMENT NUMBER: 132:117180

TITLE: Lack of modulation of MDR1 gene expression by dominant inhibition of cAMP-dependent protein kinase in doxorubicin-resistant MCF-7 breast cancer cells

AUTHOR(S): Parissenti, Amadeo M.; Gannon, Brian R.; Villeneuve, David J.; Kirwan-Rhude, Angela F.; Chadderton, Antony; Gluck, Stefan

CORPORATE SOURCE: Department of Research, Northeastern Ontario Regional Cancer Centre, Sudbury, ON, P3E 5J1, Can.

SOURCE: International Journal of Cancer (1999), 82(6), 893-900

Serial Number: 10/580,507

CODEN: IJCNAW; ISSN: 0020-7136

PUBLISHER: Wiley-Liss, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 20 Sep 1999

AB The drug transporter P-glycoprotein (P-gp) appears to play an important role in the ability of tumor cells to evade killing by chemotherapeutic agents. Using pharmacol. inhibitors of cAMP-dependent protein kinase (PKA), it has been suggested that, similar to rodent model systems, the human P-gp gene (MDR1) is also under PKA-dependent control and that PKA inhibition may prove useful in reducing drug resistance in human cancer cells. To test this hypothesis, we stably transformed doxorubicin (Adriamycin)-resistant human MCF-7 breast cancer cells (MCF-7ADR) with a vector that inhibits PKA activity by inducing over-expression of mutant type I α PKA regulatory (RI α) subunits. Two transformants (MCF-7ADR-A and MCF-7ADR-B) were found to express mutant RI α subunits and to possess markedly reduced PKA activity; another transformant (MCF-7ADR-9) lacked mutant RI α subunit expression and exhibited no inhibition of PKA activity. In contrast with findings in Chinese hamster ovary and YI adrenal cells, P-gp levels and cellular sensitivity to drugs which are P-gp substrates were unchanged in the PKA-inhibited transformants, suggesting that P-gp expression and function are not under PKA-dependent control in MCF-7ADR cells. Growth and saturation densities of the cell lines were highly correlated with level of PKA catalytic activity, suggesting that PKA inhibition may prove useful in inhibiting growth of breast tumor cells, even upon establishment of resistance to doxorubicin. However, our results challenge current proposals that drug sensitivity in P-gp-expressing human tumor cells may be restored by blocking MDR1 gene expression through inhibition of PKA activity.

REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L621 ANSWER 7 OF 33 HCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 12

ACCESSION NUMBER: 1999:616586 HCAPLUS Full-text

DOCUMENT NUMBER: 132:131879

TITLE: Dimerization of mitochondrial Bax is associated with increased drug response in Bax-transfected A253 cells

AUTHOR(S): Guo, Bin; Yin, Ming-Biao; Toth, Karoly; Cao, Shousong; Azrak, Rami G.; Rustum, Youcef M.

CORPORATE SOURCE: Grace Cancer Drug Center, Roswell Park Cancer Institute, Buffalo, NY, 14263, USA

SOURCE: Oncology Research (1999), 11(2), 91-99

CODEN: ONREE8; ISSN: 0965-0407

PUBLISHER: Cognizant Communication Corp.

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 27 Sep 1999

AB Human head and neck squamous cell carcinoma A253 cells, which do not express p53 and p21 proteins, were engineered to stably express about 50-fold higher level of Bax protein (A253/Bax) than the mock-transfected (A253/vec) or parental cells. Using these cell lines, studies were carried out to evaluate the role of Bax in response to anticancer drugs and to study the associated mechanisms. A253/Bax cells exhibited a significant increase in in vitro sensitivity to various anticancer drugs, including tomudex (9.5-fold), SN-38 (13.8-fold), doxorubicin (7.9-fold), taxol (3.1-fold), 5-FU (2.7-fold), and 5-FU/LV (4.5-fold). Increased level of drug-induced apoptosis was observed in A253/Bax cells in a drug concentration-dependent manner. In untreated A253/Bax cells, Bax was expressed in a monomeric state. Treatment with tomudex induced the formation of Bax dimer in a drug concentration-dependent manner. Dimerization of Bax occurred only in mitochondria, while the

Serial Number: 10/580,507

cytosolic Bax was retained in the monomeric state. Low level of Bax dimerization was also detected in parental A253 cells following tomudex exposure. In addition, Bax dimer formation was associated with mitochondrial cytochrome c release and activation of caspases in A253/Bax cells. The data suggest that Bax overexpression increases drug response by enhancing drug-induced apoptosis. Furthermore, dimerization of mitochondrial Bax and downstream mechanisms are associated with drug-induced apoptotic cell death and increased drug sensitivity.

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L621 ANSWER 8 OF 33 HCAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 13

ACCESSION NUMBER: 1998:195540 HCAPLUS Full-text

DOCUMENT NUMBER: 128:303723

ORIGINAL REFERENCE NO.: 128:60028h,60029a

TITLE: Novel cellular determinants for reversal of multidrug resistance in cells expressing P170-glycoprotein

AUTHOR(S): Yin, Ming-biao; Guo, Bin; Voigt, Wieland; Vanhoefer, Udo; Gibbs, John F.; Skenderis, Basil S.; Frank, Cheryl; Wrzosek, Carol; Rustum, Youcef M.

CORPORATE SOURCE: Department of Experimental Therapeutics, Grace Drug Center, Roswell Park Cancer Institute, Buffalo, NY, 14263, USA

SOURCE: Biochimica et Biophysica Acta, Molecular Cell Research (1998), 1401(3), 265-276

CODEN: BBAMCO; ISSN: 0167-4889

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 04 Apr 1998

AB The newly synthesized calcium channel blocker, Ro44-5912, significantly potentiates doxorubicin (Dox)-induced cytotoxicity at non-cytotoxic concns. in Dox-resistant human ovarian cell line, A2780/DX5, overexpressing P170-glycoprotein (Pgp). Induction of DNA single- and double-strand breaks (ssbs and dsbs) was measured using alkaline elution and constant-field gel electrophoresis (CFGE) assays. The results indicate that potentiation of the cytotoxicity of Dox by Ro44-5912 was accompanied by significant increases in both, Dox-induced DNA ssbs and dsbs in the resistant cells. Pulsed-field gel electrophoresis (PFGE) anal. showed that Dox induced DNA fragments in the 50-800 kilobase (kb) and 0.8-5.7 megabase (Mb) ranges. The majority of the newly synthesized DNA fragments were in the 50-800 kb range. Ro44-5912 treatment resulted in significant potentiation of DNA fragmentation in the 50-800 kb range with a minor increase in 0.8-5.7 Mb DNA fragments, suggesting that the modulator functions by potentiating nascent DNA fragmentation in the resistant cells. Exposure to Dox with Ro44-5912 was associated with a prolonged blockage of cells in the S-phase. In contrast, exposure to Dox alone resulted in temporary blockage of cells in G2/M phase (.apprx.24 h) followed by restoration of cell proliferation and normal DNA histograms at 48 h after 2 h drug exposure. Incorporation of BrdUrd by flow cytometric anal. was inhibited by Dox in the presence of Ro44-5912, showing that there is a block of DNA replication. An increased damage in newly synthesized DNA could concur with a blocked DNA replication. Moreover, slowing progression through the S-phase in cells exposed to Dox in combination with Ro44-5912 is accompanied by increased sensitivity of Dox poisons, indicating a correlation of specific S-phase perturbation with the reversal of Dox resistance by Ro44-5912 in cells expressing Pgp. The results suggest that drug-induced augmentation of nascent DNA fragmentation and specific cell-cycle perturbation are potentially important mol. determinants for reversal of multidrug resistance in addition to restoration of intracellular drug retention.

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS

Serial Number: 10/580,507

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L621 ANSWER 9 OF 33 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1346552 HCAPLUS Full-text

DOCUMENT NUMBER: 144:246713

TITLE: Effect of human recombinant monocyte chemoattractant protein-1 during the course of chemotherapy for osteosarcoma

AUTHOR(S): Chen, Zongxiong; Xu, Hao; Guo, Baoyu; Bao, Juliang; Zhang, Shuying; Jia, Lianshun

CORPORATE SOURCE: Department of Orthopaedics, Fuzhou General Hospital, Fuzhou, 350025, Peop. Rep. China

SOURCE: Shanghai Yixue (2004), 27(9), 674-676

CODEN: SIHSD8; ISSN: 0253-9934

PUBLISHER: Shanghai Yixue Bianji Weiyuanhui

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

ED Entered STN: 29 Dec 2005

AB The effect of human recombinant Monocyte Chemoattractant Protein-1 (MCP-1) during the course of chemotherapy for osteosarcoma was studied. The animal model of human osteosarcoma was established in nude mice. They were given high doses of methotrexate (HD-MTX) or human recombinant MCP-1 alone or combined, and a blank control group was set up. Observations on the growth and pathol. markers of xenotransplanted osteosarcoma were observed and pathol. examns. were made. MCP-1 inhibited the growth of osteosarcoma, but its effectiveness was not ideal. HD-MTX could inhibit significantly the growth of osteosarcoma, but the tumors could regrow. MCP-1 not only could enhance the tumor inhibition of HD-MTX, but also retard the regrowth of the tumors. Recombinant human MCP-1 can enhance significantly the therapeutic effect of HD-MTX on osteosarcoma.

L621 ANSWER 10 OF 33 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:448164 HCAPLUS Full-text

DOCUMENT NUMBER: 129:172900

ORIGINAL REFERENCE NO.: 129:35077a,35080a

TITLE: Isolation of a fungus producing vinblastine

AUTHOR(S): Guo, Bo; Li, Haiyan; Zhang, Lingqi

CORPORATE SOURCE: Dep. Biol., Yunnan Univ., Kunming, 650091, Peop. Rep. China

SOURCE: Yunnan Daxue Xuebao, Ziran Kexueban (1998), 20(3), 214-215

CODEN: YDXKES; ISSN: 0258-7971

PUBLISHER: Yunnan Daxue Xuebao Bianjibu

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

ED Entered STN: 20 Jul 1998

AB Six strains of endogenous fungi were isolated from the phloem (inner bark) of Catharanthus roseus in Weishan, Yunnan Prov. One of the fungi, 97CG1, its metabolite has been analyzed with HPLC. It showed that the fungus can produce an anticancer material-vinblastine. 97CG1 was identified as Alternaria sp.

Serial Number: 10/580,507

ACCESSION NUMBER: 2007430232 MEDLINE Full-text
DOCUMENT NUMBER: PubMed ID: 17608701
TITLE: Transformation of taxol-producing endophytic fungi by restriction enzyme-mediated integration (REMI).
AUTHOR: Wang Yechun; Guo Binhui; Miao Zhiqi; Tang Kexuan
CORPORATE SOURCE: Plant Biotechnology Research Center, School of Agriculture and Biology, School of Life Science and Technology, Fudan-SJTU-Nottingham Plant Biotechnology R&D Center, Shanghai Jiao Tong University, Shanghai, China.
SOURCE: FEMS microbiology letters, (2007 Aug) Vol. 273, No. 2, pp. 253-9. Electronic Publication: 2007-06-30. Journal code: 7705721. ISSN: 0378-1097.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: (EVALUATION STUDIES)
Journal; Article; (JOURNAL ARTICLE)
(RESEARCH SUPPORT, NON-U.S. GOV'T)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200712
ENTRY DATE: Entered STN: 27 Jul 2007
Last Updated on STN: 19 Dec 2007
Entered Medline: 18 Dec 2007
ABSTRACT:
The REMI method was used to introduce the plasmid pV2 harboring the hygromycin B phosphotransferase (hph) gene controlled by the Aspergillus nidulans trpC promoter and the trpC terminator into a taxol-producing endophytic fungus BT2. REMI transformation yielded stable transformants capable of continuing to grow on PDA medium containing 125 mug mL(-1) hygromycin B. The transformation efficiency was about 5-6 transformants mug(-1) plasmid DNA. The presence of hph gene in transformants was confirmed by PCR and Southern blot analyses. To the authors' knowledge, this is the first report on the transformation of taxol-producing endophytic fungi by the REMI technique. This study provides an effective approach for improving taxol production of endophytic fungi by the genetic engineering of taxol biosynthetic pathway genes in the future.
CONTROLLED TERM: Antifungal Agents: PD, pharmacology
Ascomycota: DE, drug effects
*Ascomycota: GE, genetics
Ascomycota: ME, metabolism
Aspergillus nidulans: GE, genetics
Blotting, Southern
Drug Resistance, Fungal: GE, genetics
*Gene Transfer Techniques
Genetic Engineering
Hygromycin B: PD, pharmacology
*Paclitaxel: BI, biosynthesis
Phosphotransferases (Alcohol Group Acceptor): GE, genetics
Polymerase Chain Reaction
Promoter Regions (Genetics)
*Transformation, Genetic
CAS REGISTRY NO.: 31282-04-9 (Hygromycin B); 33069-62-4 (Paclitaxel)
CHEMICAL NAME: 0 (Antifungal Agents); EC 2.7.1.- (Phosphotransferases (Alcohol Group Acceptor)); EC 2.7.1.119 (hygromycin-B kinase)

L621 ANSWER 12 OF 33 MEDLINE on STN
ACCESSION NUMBER: 2005515164 MEDLINE Full-text
DOCUMENT NUMBER: PubMed ID: 16139235
TITLE: The optimization of quantitative reverse transcription PCR for verification of cDNA microarray data.
AUTHOR: Hembruff Stacey L; Villeneuve David J;

Serial Number: 10/580,507

Parissenti Amadeo M
CORPORATE SOURCE: Tumor Biology Research Program, Northeastern Ontario
Regional Cancer Center, Sudbury, Ont., Canada P3E 5J1.
SOURCE: Analytical biochemistry, (2005 Oct 15) Vol. 345, No. 2, pp.
237-49.
Journal code: 0370535. ISSN: 0003-2697.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
(RESEARCH SUPPORT, NON-U.S. GOV'T)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200601
ENTRY DATE: Entered STN: 29 Sep 2005
Last Updated on STN: 19 Jan 2006
Entered Medline: 18 Jan 2006

ABSTRACT:

cDNA microarray analysis is highly useful for monitoring genome-wide changes in gene expression that occur in biological processes. Current standards require that microarray observations be verified by quantitative (Q)-PCR or other techniques. Few studies have optimized Q-PCR for verification of microarray findings. The current study assessed several variables affecting Q-PCR fidelity, including RNA extraction methods, mRNA enrichment, primers for reverse transcription, and cDNA amplification detection methods. Also assessed was the choice of reference gene on which other gene expression changes are based. The RNA for ribosomal protein S28 was found to be ideal for this purpose, with minimal variance in expression among isogenic drug-resistant cell lines. We also found that oligo (dT) primers were superior to random hexamers and that RNA extracted by the RNeasy method gave consistent S28 gene amplification without the need for mRNA enrichment, particularly when TaqMan probes were used. Nevertheless, sensitivity was sufficiently high with SYBR Green I that it was the preferred, least costly method for amplification product detection, even for low-abundance transcripts. Using the optimal method, 91-95% of the differences in gene expression identified between the cell lines by cDNA microarray analysis could be confirmed by Q-PCR, significantly superior to previously described methods.

CONTROLLED TERM: Check Tags: Female
Antibiotics, Antineoplastic: PD, pharmacology
Antineoplastic Agents, Phytogenic: PD, pharmacology
Breast Neoplasms: PA, pathology
Cell Line, Tumor
DNA, Complementary: GE, genetics
Doxorubicin: PD, pharmacology
Drug Resistance, Multiple: GE, genetics
Gene Amplification
Gene Expression
Humans
*Microarray Analysis
Organic Chemicals
Paclitaxel: PD, pharmacology
RNA: AN, analysis
RNA, Messenger: ME, metabolism
*Reverse Transcriptase Polymerase Chain Reaction
CAS REGISTRY NO.: 163795-75-3 (SYBR Green I); 23214-92-8
(Doxorubicin); 33069-62-4 (Paclitaxel);
63231-63-0 (RNA)
CHEMICAL NAME: 0 (Antibiotics, Antineoplastic); 0 (Antineoplastic Agents,
Phytogenic); 0 (DNA, Complementary); 0 (Organic Chemicals);
0 (RNA, Messenger)

Serial Number: 10/580,507

L621 ANSWER 13 OF 33 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on
STN DUPLICATE 1

ACCESSION NUMBER: 2007:374344 BIOSIS Full-text

DOCUMENT NUMBER: PREV200700374919

TITLE: Gene expression profiles as biomarkers for the prediction
of chemotherapy drug response in human tumour cells.

AUTHOR(S): Parissenti, Amadeo M. [Reprint Author];
Hembruff, Stacey L.; Villeneuve, David J.
; Veitch, Zachary; Guo, Baoqing; Eng, Jamei

CORPORATE SOURCE: Sudbury Reg Hosp, Tumor Biol Res Program, 41 Ramsey Lake
Rd, Sudbury, ON P3E 5J1, Canada
aparissenti@hrsrh.on.ca

SOURCE: Anti-Cancer Drugs, (JUN 2007) Vol. 18, No. 5, pp. 499-523.
CODEN: ANTDEV. ISSN: 0959-4973.

DOCUMENT TYPE: Article
General Review; (Literature Review)

LANGUAGE: English

ENTRY DATE: Entered STN: 4 Jul 2007

Last Updated on STN: 4 Jul 2007

ABSTRACT:Genome profiling approaches such as cDNA microarray analysis and
quantitative reverse transcription polymerase chain reaction are playing
ever-increasing roles in the classification of human cancers and in the
discovery of biomarkers for the prediction of prognosis in cancer patients.
Increasing research efforts are also being directed at identifying set of genes
whose expression can be correlated with response to specific drugs or drug
combinations. Such genes hold the prospect of tailoring chemotherapy regimens
to the individual patient, based on tumour or host gene expression profiles.
This review outlines recent advances and challenges in using genome profiling
for the identification of tumour or host genes whose expression correlates with
response to chemotherapy drugs both in vitro and in clinical studies. Genetic
predictors of response to a variety of anticancer agents are discussed,
including the anthracyclines, taxanes, topoisomerase I and II inhibitors,
nucleoside analogs, alkylating agents, and vinca alkaloids.

CONCEPT CODE: Cytology - Human 02508
Genetics - General 03502
Genetics - Human 03508
Biochemistry studies - General 10060
Biochemistry studies - Nucleic acids, purines and
pyrimidines 10062
Pathology - Therapy 12512
Reproductive system - Physiology and biochemistry 16504
Reproductive system - Pathology 16506
Pharmacology - General 22002
Pharmacology - Clinical pharmacology 22005
Neoplasms - Pathology, clinical aspects and systemic
effects 24004
Neoplasms - Therapeutic agents and therapy 24008

INDEX TERMS: Major Concepts
Pharmacology; Methods and Techniques; Molecular Genetics
(Biochemistry and Molecular Biophysics); Oncology (Human
Medicine, Medical Sciences)

INDEX TERMS: Parts, Structures, & Systems of Organisms
breast: reproductive system

INDEX TERMS: Diseases
breast cancer: neoplastic disease, reproductive system
disease/female
Breast Neoplasms (MeSH)

INDEX TERMS: Chemicals & Biochemicals

Serial Number: 10/580,507

doxorubicin: antineoplastic-drug; paclitaxel:
antineoplastic-drug; docetaxel: antineoplastic-drug;
epirubicin: antineoplastic-drug; daunorubicin:
antineoplastic-drug; taxane: antineoplastic-drug;
alkylating agent: antineoplastic-drug; nucleoside
analog: antineoplastic-drug; vinca alkaloid:
antineoplastic-drug; topoisomerase I inhibitor:
antineoplastic-drug; topoisomerase II inhibitor:
antineoplastic-drug

INDEX TERMS:

Methods & Equipment
gene profiling: laboratory techniques, genetic
techniques

INDEX TERMS:

Miscellaneous Descriptors
genome

ORGANISM:

Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
human (common)
MDA-MB-231 cell line (cell_line): human breast cancer
cells
LNCaP cell line (cell_line): human prostate cancer cells
PC3 cell line (cell_line): human prostate cancer cells
SKOV-3 cell line (cell_line): human ovarian carcinoma
cells
MCF-7 cell line (cell_line): human breast adenocarcinoma
cells
OVCAR8 cell line (cell_line): human ovarian carcinoma
cells
HN12 cell line (cell_line): human head and neck squamous
carcinoma cells
HN30 cell line (cell_line): human head and neck squamous
carcinoma cells
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates,
Vertebrates

REGISTRY NUMBER:

23214-92-8 (doxorubicin)
33069-62-4 (paclitaxel)
114977-28-5 (docetaxel)
56420-45-2 (epirubicin)
20830-81-3 (daunorubicin)
1605-68-1 (taxane)

GENE NAME:

human TOP2A gene [human topoisomerase gene] (Hominidae):
expression; human ABCB1 gene [human ATP-binding cassette,
sub-family B gene] (Hominidae): expression; human S100P
gene [human S100 calcium binding protein P gene]
(Hominidae): expression; human ABCC1 gene [human
ATP-binding cassette, sub-family C gene] (Hominidae):
expression

L621 ANSWER 14 OF 33 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on
STN DUPLICATE 3

ACCESSION NUMBER: 2006:433313 BIOSIS Full-text

DOCUMENT NUMBER: PREV200600424099

TITLE: An endophytic Taxol-producing fungus BT2 isolated from
Taxus chinensis var. mairei.

AUTHOR(S): Guo, B. H.; Wang, Y. C.; Zhou, X. W.; Hu, K.;
Tan, F.; Miao, Z. Q.; Tang, K. X. [Reprint Author]

CORPORATE SOURCE: Shanghai Jiao Tong Univ, Fudan SJTU Nottingham Plant

Serial Number: 10/580,507

Biotechnol R and D Ctr, Shanghai Key Lab Agrobiotechnol,
Plant Biotechnol Res Ctr, Sch Agr and Biol, Shanghai 200030,
Peoples R China
kxtangl@yahoo.com

SOURCE: African Journal of Biotechnology, (MAY 16 2006) Vol. 5, No.
10, pp. 875-877.
ISSN: 1684-5315.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 30 Aug 2006

Last Updated on STN: 30 Aug 2006

ABSTRACT:BT2, a newly isolated endophytic fungus from *Taxus chinensis* var. *mairei*, was observed to produce Taxol. Besides Taxol, a potent anticancer drug, BT2 could also yield taxane baccatin III, which was an important intermediate for Taxol and semi-synthesis of Taxol in industry. The isolation of such a fungus may provide a promising alternative approach to produce Taxol, and BT2 can serve as a potential material for fungus engineering to improve Taxol production.

CONCEPT CODE: Enzymes - General and comparative studies: coenzymes
10802

Pathology - Therapy 12512

Neoplasms - Therapeutic agents and therapy 24008

Plant physiology - Enzymes 51518

Pharmacognosy and pharmaceutical botany 54000

INDEX TERMS: Major Concepts

Enzymology (Biochemistry and Molecular Biophysics);

Pharmacognosy (Pharmacology)

INDEX TERMS: Chemicals & Biochemicals

taxane baccatin III: expression; BT2: expression; Taxol:

antineoplastic-drug, synthesis

INDEX TERMS: Methods & Equipment

fungus engineering: laboratory techniques

ORGANISM: Classifier

Taxopsida 25105

Super Taxa

Gymnospermae; Spermatophyta; Plantae

Organism Name

Taxus chinensis (species) [*mairei* (variety)]: medicinal
plant

Taxa Notes

Gymnosperms, Plants, Spermatophytes, Vascular Plants

REGISTRY NUMBER: 33069-62-4 (Taxol)

L621 ANSWER 15 OF 33 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on
STN DUPLICATE 4

ACCESSION NUMBER: 2006:253392 BIOSIS Full-text

DOCUMENT NUMBER: PREV200600242944

TITLE: Taxol synthesis.

AUTHOR(S): Guo, B. H.; Kai, G. Y.; Jin, H. B.; Tang, K. X.
[Reprint Author]

CORPORATE SOURCE: Shanghai Jiao Tong Univ, Sch Agr and Biol, Fudan SJTU
Nottingham Plant Biotechnol R and D Ctr, Plant Biotechnol
Res Ctr, Shanghai 200030, Peoples R China
kxtangl@yahoo.com

SOURCE: African Journal of Biotechnology, (JAN 2 2006) Vol. 5, No.
1, pp. 15-20.
ISSN: 1684-5315.

DOCUMENT TYPE: Article

General Review; (Literature Review)

LANGUAGE: English

Serial Number: 10/580,507

OTHER SOURCE: GenBank-AY364469; EMBL-AY364469; DDJB-AY364469;
GenBank-AF081514; EMBL-AF081514; DDJB-AF081514;
GenBank-AF190130; EMBL-AF190130; DDJB-AF190130;
GenBank-AF297618; EMBL-AF297618; DDJB-AF297618;
GenBank-AF193765; EMBL-AF193765; DDJB-AF193765;
GenBank-AF318211; EMBL-AF318211; DDJB-AF318211;
GenBank-AY056019; EMBL-AY056019; DDJB-AY056019;
GenBank-AF466397; EMBL-AF466397; DDJB-AF466397;
GenBank-AY518383; EMBL-AY518383; DDJB-AY518383;
GenBank-AY307951; EMBL-AY307951; DDJB-AY307951;
GenBank-AY289209; EMBL-AY289209; DDJB-AY289209;
GenBank-AY582743; EMBL-AY582743; DDJB-AY582743

ENTRY DATE: Entered STN: 26 Apr 2006

Last Updated on STN: 26 Apr 2006

ABSTRACT:Being a complex diterpenoid, the potent anticancer drug, Taxol, requires complicated steps for its biosynthesis. In the present article, recent advances on Taxol biosynthesis pathway are reviewed, including many recently reported genes that regulate Taxol biosynthesis. To meet the urgent need of clinic and scientific research, besides Taxus supply, other approaches to obtain Taxol have also been discussed here.

CONCEPT CODE: Genetics - General 03502
Genetics - Plant 03504
Biochemistry studies - General 10060
Biochemistry studies - Nucleic acids, purines and pyrimidines 10062
Biochemistry studies - Proteins, peptides and amino acids 10064
Pathology - Therapy 12512
Neoplasms - Pathology, clinical aspects and systemic effects 24004
Neoplasms - Therapeutic agents and therapy 24008
Tissue culture, apparatus, methods and media 32500
Food microbiology - General and miscellaneous 39008
Pharmacognosy and pharmaceutical botany 54000

INDEX TERMS: Major Concepts
Pharmacognosy (Pharmacology); Molecular Genetics
(Biochemistry and Molecular Biophysics); Tumor Biology;
Bioprocess Engineering

INDEX TERMS: Chemicals & Biochemicals
paclitaxel [Taxol]: antineoplastic-drug,
radiosensitizer-drug, biosynthesis

INDEX TERMS: Sequence Data
AY364469: GenBank, EMBL, DDJB, amino acid sequence,
nucleotide sequence; AF081514: GenBank, EMBL, DDJB,
amino acid sequence, nucleotide sequence; AF190130:
GenBank, EMBL, DDJB, amino acid sequence, nucleotide
sequence; AF297618: GenBank, EMBL, DDJB, amino acid
sequence, nucleotide sequence; AF193765: GenBank, EMBL,
DDJB, amino acid sequence, nucleotide sequence;
AF318211: GenBank, EMBL, DDJB, amino acid sequence,
nucleotide sequence; AY056019: GenBank, EMBL, DDJB,
amino acid sequence, nucleotide sequence; AF466397:
GenBank, EMBL, DDJB, amino acid sequence, nucleotide
sequence; AY518383: GenBank, EMBL, DDJB, amino acid
sequence, nucleotide sequence; AY307951: GenBank, EMBL,
DDJB, amino acid sequence, nucleotide sequence;
AY289209: GenBank, EMBL, DDJB, amino acid sequence,
nucleotide sequence; AY582743: GenBank, EMBL, DDJB,
amino acid sequence, nucleotide sequence

INDEX TERMS: Methods & Equipment

Serial Number: 10/580,507

cell culture: laboratory techniques, culturing
techniques

INDEX TERMS: Miscellaneous Descriptors
bioengineering

ORGANISM: Classifier
Fungi Imperfecti or Deuteromycetes 15500
Super Taxa
Fungi; Plantae
Organism Name
Pestalotiopsis microspora (species): fermentation agent,
strain-CP-4
Taxa Notes
Fungi, Microorganisms, Nonvascular Plants, Plants

ORGANISM: Classifier
Taxopsida 25105
Super Taxa
Gymnospermae; Spermatophyta; Plantae
Organism Name
Taxus brevifolia (species) [yew (common)]: medicinal
plant
Taxa Notes
Gymnosperms, Plants, Spermatophytes, Vascular Plants

REGISTRY NUMBER: 33069-62-4 (paclitaxel)
33069-62-4 (Taxol)

GENE NAME: Taxus brevifolia Taxadiene synthase gene (Taxopsida); Taxus
brevifolia GGPPS gene (Taxopsida); Taxus brevifolia TAT
gene (Taxopsida); Taxus brevifolia TBT gene (Taxopsida);
Taxus brevifolia DBAT gene (Taxopsida); Taxus brevifolia
Taxane 10-hydroxylase gene (Taxopsida); Taxus brevifolia
Taxane 13-hydroxylase gene (Taxopsida); Taxus brevifolia
BAPT gene (Taxopsida); Taxus brevifolia DBTNBT gene
(Taxopsida); Taxus brevifolia Taxane 2-hydroxylase gene
(Taxopsida); Taxus brevifolia Taxane 7-hydroxylase gene
(Taxopsida); Taxus brevifolia Taxane 5-hydroxylase gene
(Taxopsida); Taxus brevifolia PAM gene (Taxopsida)

L621 ANSWER 16 OF 33 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on
STN DUPLICATE 8

ACCESSION NUMBER: 2001:281048 BIOSIS Full-text

DOCUMENT NUMBER: PREV200100281048

TITLE: HER-2 expression is a prognostic factor in patients with
metastatic breast cancer treated with a combination of
high-dose cyclophosphamide, mitoxantrone, paclitaxel and
autologous blood stem cell support.

AUTHOR(S): Bewick, M. [Reprint author]; Conlon, M.; Gerard, S.; Lee,
H.; Parissenti, A. M.; Zhang, L.; Gluck, S.;
Lafrenie, R. M.

CORPORATE SOURCE: Northeastern Ontario Regional Cancer Center, 41 Ramsey Lake
Road, Sudbury, ON, P3E 5J1, Canada

SOURCE: Bone Marrow Transplantation, (April 2, 2001) Vol. 27, No.
8, pp. 847-853. print.
ISSN: 0268-3369.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 13 Jun 2001

Last Updated on STN: 19 Feb 2002

ABSTRACT: The expression levels of a circulating extracellular domain of HER-2
can be detected in the plasma and serum of patients with metastatic breast
cancer using an enzyme immunoassay (ELISA) method. In this study, we evaluated
the clinical significance of high and low levels of HER-2 in the plasma of 46

Serial Number: 10/580,507

patients with metastatic breast cancer enrolled in a clinical trial of high-dose chemotherapy (HDCT) using cyclophosphamide, mitoxantrone, and paclitaxel with autologous stem cell transplantation (ASCT). Using 2500 U/ml as the cut-point, 20 patients (46%) had elevated HER-2 levels (HER-2 positive). Our results suggest that patients with metastatic breast cancer and high soluble plasma HER-2 have a significantly poorer overall (OS) and progression-free survival (PFS) following high-dose chemotherapy with paclitaxel and ASCT. The median OS of patients with low levels of HER-2 was significantly longer ($P < 0.01$) than the median OS of patients with high levels of HER-2 (29.8 months vs 15.9 months). PFS was also significantly longer ($P < 0.01$) for patients who were HER-2-negative, than for patients who were HER-2-positive (13.0 vs 8.6 months). Univariate analysis showed that patients with liver or lung metastases had significantly reduced OS and PFS. Patients with metastases to two or more sites also had a significantly reduced time to disease progression, but not OS. In multivariable analysis, lung metastases contributed along with HER-2-positive status to determine a group of patients with significantly poorer OS. However, HER-2-positive status remained the only independent predictor of PFS.

CONCEPT CODE: Neoplasms - Therapeutic agents and therapy 24008
Cytology - Animal 02506
Cytology - Human 02508
Biochemistry studies - General 10060
Pathology - Therapy 12512
Blood - Blood and lymph studies 15002
Blood - Blood cell studies 15004
Blood - Blood, lymphatic and reticuloendothelial pathologies 15006
Pharmacology - General 22002
Pharmacology - Clinical pharmacology 22005
Neoplasms - Pathology, clinical aspects and systemic effects 24004
Immunology - Immunopathology, tissue immunology 34508

INDEX TERMS: Major Concepts
Clinical Immunology (Human Medicine, Medical Sciences);
Hematology (Human Medicine, Medical Sciences); Oncology
(Human Medicine, Medical Sciences); Pharmacology

INDEX TERMS: Parts, Structures, & Systems of Organisms
peripheral blood stem cell: blood and lymphatics

INDEX TERMS: Chemicals & Biochemicals
cyclophosphamide: antineoplastic-drug; mitoxantrone:
antineoplastic-drug; paclitaxel: antineoplastic-drug

INDEX TERMS: Methods & Equipment
ELISA: detection method

ORGANISM: Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
human: patient
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates,
Vertebrates

REGISTRY NUMBER: 50-18-0 (cyclophosphamide)
65271-80-9 (mitoxantrone)
33069-62-4 (paclitaxel)

L621 ANSWER 17 OF 33 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on
STN

ACCESSION NUMBER: 2008:488553 BIOSIS Full-text
DOCUMENT NUMBER: PREV200800488552

Serial Number: 10/580,507

TITLE: Role of promoter methylation in the induction of ABCB1 gene expression in anthracycline-resistant and paclitaxel-resistant breast tumor cells.

AUTHOR(S): Reed, Kerry [Reprint Author]; Hembruff, Stacey L.; Sprowl, Jason; Laberge, Monique; Parissenti, Amadeo M.

CORPORATE SOURCE: Laurentian Univ, Program Biomol Sci, Sudbury, ON P3E 2C6, Canada

SOURCE: Proceedings of the American Association for Cancer Research Annual Meeting, (APR 2008) Vol. 49, pp. 1022. Meeting Info.: 99th Annual Meeting of the American-Association-for-Cancer-Research. San Diego, CA, USA. April 12 -16, 2008. Amer Assoc Canc Res. ISSN: 0197-016X.

DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 3 Sep 2008
Last Updated on STN: 3 Sep 2008

CONCEPT CODE: General biology - Symposia, transactions and proceedings 00520
Cytology - Human 02508
Genetics - General 03502
Genetics - Human 03508
Biochemistry studies - General 10060
Biochemistry studies - Nucleic acids, purines and pyrimidines 10062
Pathology - Therapy 12512
Reproductive system - Physiology and biochemistry 16504
Reproductive system - Pathology 16506
Pharmacology - General 22002
Pharmacology - Clinical pharmacology 22005
Neoplasms - Pathology, clinical aspects and systemic effects 24004
Neoplasms - Therapeutic agents and therapy 24008

INDEX TERMS: Major Concepts
Pharmacology; Tumor Biology; Molecular Genetics (Biochemistry and Molecular Biophysics); Reproductive System (Reproduction)

INDEX TERMS: Diseases
breast cancer: neoplastic disease, reproductive system disease/female, drug therapy
Breast Neoplasms (MeSH)

INDEX TERMS: Chemicals & Biochemicals
genomic DNA; doxorubicin: antineoplastic-drug; paclitaxel: antineoplastic-drug; anthracycline: antineoplastic-drug; epirubicin: antineoplastic-drug

INDEX TERMS: Methods & Equipment
flow cytometry: laboratory techniques, histology and cytology techniques; chemotherapy: therapeutic and prophylactic techniques, clinical techniques; gene expression analysis: laboratory techniques, genetic techniques; quantitative PCR: laboratory techniques, genetic techniques

INDEX TERMS: Miscellaneous Descriptors
drug resistance

ORGANISM: Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia

Serial Number: 10/580,507

Organism Name

MCF-7 cell line (cell_line): human breast cancer cells

Taxa Notes

Animals, Chordates, Humans, Mammals, Primates,
Vertebrates

REGISTRY NUMBER: 23214-92-8 (doxorubicin)
33069-62-4 (paclitaxel)
56420-45-2 (epirubicin)

GENE NAME: human ABCB1 gene (Hominidae): expression

L621 ANSWER 18 OF 33 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on
STN

ACCESSION NUMBER: 2008:487491 BIOSIS Full-text

DOCUMENT NUMBER: PREV200800487490

TITLE: Clustering of anthracycline-containing lysosomes in
drug-resistant MCF-7 cells in response to tesmilifene.

AUTHOR(S): Guo, Baoqing [Reprint Author]; Sprowl, Jason;
Nembruff, Stacey L.; Villeneuve, David J.
; Parissenti, Amadeo M.

CORPORATE SOURCE: Sudbury Reg Hosp, Reg Canc Program, Sudbury, ON, Canada
SOURCE: Proceedings of the American Association for Cancer Research
Annual Meeting, (APR 2008) Vol. 49, pp. 765.
Meeting Info.: 99th Annual Meeting of the
American-Association-for-Cancer-Research. San Diego, CA,
USA. April 12 -16, 2008. Amer Assoc Canc Res.
ISSN: 0197-016X.

DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 3 Sep 2008
Last Updated on STN: 3 Sep 2008

CONCEPT CODE: General biology - Symposia, transactions and proceedings
00520
Cytology - Human 02508
Genetics - General 03502
Genetics - Human 03508
Biochemistry studies - General 10060
Biochemistry studies - Nucleic acids, purines and
pyrimidines 10062
Pathology - Therapy 12512
Reproductive system - Physiology and biochemistry 16504
Reproductive system - Pathology 16506
Pharmacology - General 22002
Pharmacology - Clinical pharmacology 22005
Neoplasms - Pathology, clinical aspects and systemic
effects 24004
Neoplasms - Therapeutic agents and therapy 24008

INDEX TERMS: Major Concepts
Pharmacology; Molecular Genetics (Biochemistry and
Molecular Biophysics); Reproductive System
(Reproduction); Tumor Biology

INDEX TERMS: Diseases
metastatic breast cancer: neoplastic disease,
reproductive system disease/female, drug therapy,
genetics
Breast Neoplasms (MeSH); Neoplasm Metastasis (MeSH)

INDEX TERMS: Chemicals & Biochemicals
doxorubicin: antineoplastic-drug; anthracycline:
antineoplastic-drug; epirubicin: antineoplastic-drug;
paclitaxel: antineoplastic-drug, radiosensitizer-drug;

Serial Number: 10/580,507

tesmilifene: antineoplastic-drug; genes: regulation

ORGANISM: Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
human (common)
MCF 7 cell line (cell_line): drug resistant human breast cancer cells
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates, Vertebrates

REGISTRY NUMBER: 23214-92-8 (doxorubicin)
56420-45-2 (epirubicin)
33069-62-4 (paclitaxel)

GENE NAME: human CTSC gene [human cathepsin C gene] (Hominidae); human LYG2 gene [human Lysozyme G-like Protein Precursor gene] (Hominidae); human BCL2L13 gene [human Bcl-2 like 13 protein gene] (Hominidae)

L621 ANSWER 19 OF 33 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN

ACCESSION NUMBER: 2008:484969 BIOSIS Full-text

DOCUMENT NUMBER: PREV200800484968

TITLE: Chemosensitivity targets in multidrug resistant (MDR) cells: a comparative study of amonafide and daunorubicin.

AUTHOR(S): Hembruff, Stacey L. [Reprint Author]; Villeseuve, David J.; Guo, Baoqing; Chau, MyDoanh; Paterson, Jesse; Ajami, Alfred M.; Parissenti, Amadeo M.

CORPORATE SOURCE: Sudbury Reg Hosp, Reg Canc Program, Sudbury, ON, Canada

SOURCE: Proceedings of the American Association for Cancer Research Annual Meeting, (APR 2008) Vol. 49, pp. 163.
Meeting Info.: 99th Annual Meeting of the American-Association-for-Cancer-Research. San Diego, CA, USA. April 12 -16, 2008. Amer Assoc Canc Res.
ISSN: 0197-016X.

DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 3 Sep 2008
Last Updated on STN: 3 Sep 2008

CONCEPT CODE: General biology - Symposia, transactions and proceedings 00520
Pathology - Therapy 12512
Blood - Blood, lymphatic and reticuloendothelial pathologies 15006
Reproductive system - Physiology and biochemistry 16504
Reproductive system - Pathology 16506
Pharmacology - General 22002
Pharmacology - Clinical pharmacology 22005
Neoplasms - Pathology, clinical aspects and systemic effects 24004
Neoplasms - Therapeutic agents and therapy 24008
Neoplasms - Blood and reticuloendothelial neoplasms 24010

INDEX TERMS: Major Concepts
Pharmacology; Tumor Biology; Reproductive System (Reproduction)

INDEX TERMS: Parts, Structures, & Systems of Organisms
breast: reproductive system

Serial Number: 10/580,507

INDEX TERMS: Diseases
breast cancer: neoplastic disease, reproductive system
disease/female
Breast Neoplasms (MeSH)

INDEX TERMS: Diseases
acute myeloid leukemia: neoplastic disease, blood and
lymphatic disease
Leukemia, Myeloid (MeSH)

INDEX TERMS: Chemicals & Biochemicals
epirubicin: antineoplastic-drug; topoisomerase II
inhibitor; amonafide [Xanafide]: antineoplastic-drug,
enzyme inhibitor-drug; datmorubicin: antineoplastic-drug

INDEX TERMS: Miscellaneous Descriptors
comparative study; multidrug resistance

ORGANISM: Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
human (common)
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates,
Vertebrates

REGISTRY NUMBER: 56420-45-2 (epirubicin)
69408-81-7 (amonafide)
69408-81-7 (Xanafide)

L621 ANSWER 20 OF 33 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on
STN

ACCESSION NUMBER: 2008:397045 BIOSIS Full-text
DOCUMENT NUMBER: PREV200800397044
TITLE: Bioactive natural products from endophytes: A review.
AUTHOR(S): Guo, B. [Reprint Author]; Wang, Y.; Sun, X.;
Tang, K.
CORPORATE SOURCE: Shanghai Jiao Tong Univ, Sch Life Sci and Technol, Sch Agr
and Biol, Shanghai Key Lab Agrobiotechnol, Shanghai 200030,
Peoples R China
kxtang1@yahoo.com
SOURCE: Applied Biochemistry and Microbiology, (MAR-APR 2008) Vol.
44, No. 2, pp. 136-142.
CODEN: APBMAC. ISSN: 0003-6838.
DOCUMENT TYPE: Article
General Review; (Literature Review)
LANGUAGE: English
ENTRY DATE: Entered STN: 23 Jul 2008
Last Updated on STN: 23 Jul 2008

ABSTRACT: Endophytes, microorganisms that reside in the internal tissues of
living plants without causing any immediate overt negative effects, have been
found in every plant species examined to date and recognized as potential
sources of novel natural products for exploitation in medicine, agriculture,
and industry with more and more bioactive natural products isolated from the
microorganisms. In this review, we focus mainly on bioactive natural products
from endophytic microorganisms by their different functional roles. The
prospect and facing problems of isolating natural products from endophytes are
also discussed.

CONCEPT CODE: Biochemistry studies - General 10060
Pathology - Therapy 12512
Neoplasms - Therapeutic agents and therapy 24008
Chemotherapy - General, methods and metabolism 38502
Botany: general and systematic - Fungi 50506

Serial Number: 10/580,507

INDEX TERMS: Pharmacognosy and pharmaceutical botany 54000
Major Concepts
INDEX TERMS: Pharmacognosy (Pharmacology); Mycology
Parts, Structures, & Systems of Organisms
endophyte
INDEX TERMS: Chemicals & Biochemicals
camptothecin: antineoplastic-drug, enzyme
inhibitor-drug, pharmacodynamics; taxol:
antineoplastic-drug, pharmacodynamics; subglutinin:
antiinfective-drug, pharmacodynamics; isopectacin:
antiinfective-drug, pharmacodynamics; pectacin:
antiinfective-drug, pharmacodynamics
ORGANISM: Classifier
Compositae 25840
Super Taxa
Dicotyledones; Angiospermae; Spermatophyta; Plantae
Organism Name
Artemisia annua (species): medicinal plant
Taxa Notes
Angiosperms, Dicots, Plants, Spermatophytes, Vascular
Plants
ORGANISM: Classifier
Fungi Imperfecti or Deuteromycetes 15500
Super Taxa
Fungi; Plantae
Organism Name
Colletotrichum (genus)
Taxa Notes
Fungi, Microorganisms, Nonvascular Plants, Plants
REGISTRY NUMBER: 7689-03-4 (camptothecin)
33069-62-4 (taxol)
573987-13-0 (pectacin)
L621 ANSWER 21 OF 33 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on
STN
ACCESSION NUMBER: 2008:64906 BIOSIS Full-text
DOCUMENT NUMBER: PREV200800060543
TITLE: Molecular cloning and functional analysis of the gene
encoding 3-hydroxy-3-methylglutaryl coenzyme A reductase
from hazel (Corylus avellana L. gasaway).
AUTHOR(S): Wang, Yechun; Guo, Binhui; Zhang, Fei; Yao,
Hongyan; Miao, Zhiqi; Tang, Kexuan [Reprint Author]
CORPORATE SOURCE: Shanghai Jiao Tong Univ, Plant Biotechnol Res Ctr, Sch Agr
and Biol, Shanghai 200030, Peoples R China
kxtang1@yahoo.com
SOURCE: Journal of Biochemistry and Molecular Biology, (NOV 30
2007) Vol. 40, No. 6, pp. 861-869.
ISSN: 1225-8687.
DOCUMENT TYPE: Article
LANGUAGE: English
OTHER SOURCE: GenBank-EF206343; EMBL-EF206343; DDBJ-EF206343
ENTRY DATE: Entered STN: 9 Jan 2008
Last Updated on STN: 9 Jan 2008
ABSTRACT: The enzyme 3-hydroxy-3-methylglutaryl-CoA reductase (HMGR; EC1.1.1.34)
catalyzes the first committed step of isoprenoids biosynthesis in MVA pathway.
Here we report for the first time the cloning and characterization of a
full-length cDNA encoding HMGR (designated as CgHMGR, GenBank accession number
EF206343) from hazel (Corylus avellana L. Gasaway), a taxol-producing plant
species. The full-length cDNA of CgHMGR was 2064 bp containing a 1704-bp ORF
encoding 567 amino acids. Bioinformatic analyses revealed that the deduced

Serial Number: 10/580,507

CgHMGR had extensive homology with other plant HMGRs and contained two transmembrane domains and a catalytic domain. The predicted 3-D model of CgHMGR had a typical spatial structure of HMGRs. Southern blot analysis indicated that CgHMGR belonged to a small gene family. Expression analysis revealed that CgHMGR expressed high in roots, and low in leaves and stems, and the expression of CgHMGR could be up-regulated by methyl jasmonate (MeJA). The functional color assay in *Escherichia coli* showed that CgHMGR could accelerate the biosynthesis of beta-carotene, indicating that CgHMGR encoded a functional protein. The cloning, characterization and functional analysis of CgHMGR gene will enable us to further understand the role of CgHMGR involved in taxol biosynthetic pathway in *C. avellana* at molecular level.

CONCEPT CODE: Genetics - General 03502
 Genetics - Plant 03504
 Biochemistry studies - General 10060
 Biochemistry studies - Nucleic acids, purines and
 pyrimidines 10062
 Biochemistry studies - Proteins, peptides and amino acids
 10064
 Biochemistry studies - Lipids 10066
 Enzymes - General and comparative studies: coenzymes
 10802
 Pathology - Therapy 12512
 Neoplasms - Therapeutic agents and therapy 24008
 Physiology and biochemistry of bacteria 31000
 Genetics of bacteria and viruses 31500
 Plant physiology - Enzymes 51518
 Pharmacognosy and pharmaceutical botany 54000

INDEX TERMS: Major Concepts
 Methods and Techniques; Pharmacognosy (Pharmacology);
 Molecular Genetics (Biochemistry and Molecular
 Biophysics); Enzymology (Biochemistry and Molecular
 Biophysics)

INDEX TERMS: Parts, Structures, & Systems of Organisms
 leaf; root

INDEX TERMS: Chemicals & Biochemicals
 cDNA [complementary DNA]; beta-carotene; methyl
 jasmonate; taxol: antineoplastic-drug; isoprenoid;
 3-hydroxy-3-methylglutaryl-coenzyme A reductase [EC
 1.1.1.34]; transmembrane domain, catalytic domain

INDEX TERMS: Sequence Data
 EF206343: GenBank, EMBL, DDBJ, amino acid sequence,
 nucleotide sequence

INDEX TERMS: Methods & Equipment
 molecular cloning: laboratory techniques, genetic
 techniques

ORGANISM: Classifier
 Betulaceae 25645
 Super Taxa
 Dicotyledones; Angiospermae; Spermatophyta; Plantae
 Organism Name
 Corylus avellana (species) [hazel (common)]
 Taxa Notes
 Angiosperms, Dicots, Plants, Spermatophytes, Vascular
 Plants

ORGANISM: Classifier
 Enterobacteriaceae 06702
 Super Taxa
 Facultatively Anaerobic Gram-Negative Rods; Eubacteria;
 Bacteria; Microorganisms
 Organism Name

Serial Number: 10/580,507

Escherichia coli (species)

Taxa Notes

Bacteria, Eubacteria, Microorganisms

REGISTRY NUMBER:

7235-40-7 (beta-carotene)

1211-29-6 (methyl jasmonate)

~~33069-62-4~~ (taxol)

37250-24-1 (3-hydroxy-3-methylglutaryl-coenzyme A reductase)

37250-24-1 (EC 1.1.1.34)

GENE NAME:

Corylus avellana HMGR gene [Corylus avellana

3-hydroxy-3-methylglutaryl-coenzyme A reductase gene]

(Betulaceae): expression, regulation

L621 ANSWER 22 OF 33 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on
STN

ACCESSION NUMBER: 2006:588782 BIOSIS Full-text

DOCUMENT NUMBER: PREV200600599408

TITLE: Preferential potentiation of paclitaxel and doxorubicin
cytotoxicity in drug-resistant breast tumor cells by
tesmilifene.

AUTHOR(S): Hembruff, Stacey L. [Reprint Author];

Villeneuve, David J.; Farissenti, Amadeo M.

CORPORATE SOURCE: Sudbury Reg Hosp, Sudbury, ON, Canada

SOURCE: Proceedings of the American Association for Cancer Research
Annual Meeting, (APR 2006) Vol. 47, pp. 1273.

Meeting Info.: 97th Annual Meeting of the
American-Association-for-Cancer-Research (AACR).

Washington, DC, USA. April 01 -05, 2006. Amer Assoc Canc
Res.

ISSN: 0197-016X.

DOCUMENT TYPE: Conference; (Meeting)

Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 8 Nov 2006

Last Updated on STN: 8 Nov 2006

CONCEPT CODE: General biology - Symposia, transactions and proceedings
00520

Cytology - Human 02508

Biochemistry studies - General 10060

Biochemistry studies - Proteins, peptides and amino acids
10064

Biochemistry studies - Carbohydrates 10068

Pathology - Therapy 12512

Reproductive system - Physiology and biochemistry 16504

Pharmacology - General 22002

Pharmacology - Clinical pharmacology 22005

Neoplasms - Pathology, clinical aspects and systemic
effects 24004

Neoplasms - Therapeutic agents and therapy 24008

INDEX TERMS: Major Concepts

Pharmacology; Reproductive System (Reproduction); Tumor
Biology

INDEX TERMS: Chemicals & Biochemicals

P-glycoprotein [EC 3.6.3.44]: expression; doxorubicin:

antineoplastic-drug, efficacy; paclitaxel:

antineoplastic-drug, efficacy; tesmilifene:

pharmaceutical adjunct-drug, efficacy

INDEX TERMS: Methods & Equipment

chemotherapy: therapeutic and prophylactic techniques,
clinical techniques; clonogenic assay: laboratory

Serial Number: 10/580,507

techniques
INDEX TERMS: Miscellaneous Descriptors
drug resistance
ORGANISM: Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
MCF-7 cell line (cell_line): human breast cancer cells
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates,
Vertebrates
REGISTRY NUMBER: 23214-92-8 (doxorubicin)
33069-62-4 (paclitaxel)

L621 ANSWER 23 OF 33 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on
STN
ACCESSION NUMBER: 2006:587133 BIOSIS Full-text
DOCUMENT NUMBER: PREV200600597759
TITLE: Role of drug selection dose in the acquisition of
progressive resistance to doxorubicin, epirubicin,
paclitaxel or docetaxel in MCF-7 breast tumour cells.
AUTHOR(S): Veitch, Zachary [Reprint Author]; Membruff, Stacey
L.; Laberge, Monique L.; Villeneuve, David J.
; Cecchetto, Melanie; Shuart, Melissa; Parissenti,
Amadeo M.
CORPORATE SOURCE: Laurentian Univ, Sudbury, ON P3E 2C6, Canada
SOURCE: Proceedings of the American Association for Cancer Research
Annual Meeting, (APR 2006) Vol. 47, pp. 886.
Meeting Info.: 97th Annual Meeting of the
American-Association-for-Cancer-Research (AACR).
Washington, DC, USA. April 01 -05, 2006. Amer Assoc Canc
Res.
ISSN: 0197-016X.
DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LANGUAGE: English
ENTRY DATE: Entered STN: 8 Nov 2006
Last Updated on STN: 8 Nov 2006
CONCEPT CODE: General biology - Symposia, transactions and proceedings
00520
Cytology - Human 02508
Biochemistry studies - General 10060
Pathology - General 12502
Pathology - Therapy 12512
Reproductive system - Physiology and biochemistry 16504
Reproductive system - Pathology 16506
Pharmacology - General 22002
Pharmacology - Clinical pharmacology 22005
Neoplasms - Pathology, clinical aspects and systemic
effects 24004
Neoplasms - Therapeutic agents and therapy 24008
INDEX TERMS: Major Concepts
Pharmacology; Reproductive System (Reproduction); Tumor
Biology
INDEX TERMS: Diseases
breast cancer: neoplastic disease, reproductive system
disease/female, drug therapy, pathology
Breast Neoplasms (MeSH)
INDEX TERMS: Chemicals & Biochemicals

Serial Number: 10/580,507

doxorubicin: antineoplastic-drug, dosage, resistance;
drug transporter: expression; epirubicin:
antineoplastic-drug, dosage, resistance; paclitaxel:
antineoplastic-drug, dosage, resistance; docetaxel:
antineoplastic-drug, dosage, resistance

INDEX TERMS: Methods & Equipment
chemotherapy: therapeutic and prophylactic techniques,
clinical techniques

ORGANISM: Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
MCF-7 cell line (cell_line): human breast cancer cells
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates,
Vertebrates
REGISTRY NUMBER: 23214-92-8 (doxorubicin)
56420-45-2 (epirubicin)
33069-62-4 (paclitaxel)
114977-28-5 (docetaxel)

L621 ANSWER 24 OF 33 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on
STN

ACCESSION NUMBER: 2006:333801 BIOSIS Full-text

DOCUMENT NUMBER: PREV200600330596

TITLE: Isolation and expression profile analysis of a new cDNA
encoding 5-alpha-taxadienol-10-beta-hydroxylase from *Taxus*
media.

AUTHOR(S): Kai, Guoyin; Jiang, Jihong; Zhao, Dongli; Zhao, Lingxia;
Zhang, Lei; Li, Zhugang; Guo, Binhui; Sun,
Xiaofen; Miao, Zhiqi [Reprint Author]; Tang, Kexuan

CORPORATE SOURCE: Shanghai Jiao Tong Univ, Sch Life Sci and Technol, Fudan
SJTU Nottingham Plant Biotechnol R and D Ctr, Plant
Biotechnol Res Ctr, Sch Agr and Biol, Shanghai 200030,
Peoples R China
zqmiao@sjtu.edu.cn; kxtang1@yahoo.com

SOURCE: Journal of Plant Biochemistry and Biotechnology, (JAN 2006)
Vol. 15, No. 1, pp. 1-5.
ISSN: 0971-7811.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 28 Jun 2006

Last Updated on STN: 28 Jun 2006

ABSTRACT: A full-length cDNA encoding 5-alpha-taxadienol-10-beta-hydroxylase (designated as Tm10BH), which catalyzes the second cytochrome P450-dependent hydroxylation step in the Taxol biosynthetic pathway, was isolated from young leaves of *Taxus media* by rapid amplification of cDNA ends (RACE). The full-length cDNA of Tm10BH had a 1494 bp open reading frame (ORF) encoding a protein of 497 amino acid residues. The deduced protein had an isoelectric point (pI) of 8.91 and a calculated molecular weight of about 57 kDa. Sequence comparison showed that Tm10BH had high homology with hydroxylases reported previously. Tissue expression pattern analysis revealed that Tm10BH expressed strongly in leaves, weak in stems and no expression could be detected in fruits. Expression profiles of Tm10BH under different elicitor treatments such as methyl jasmonate, silver nitrate and ammonium ceric sulphate were also investigated for the first time, and the results revealed that expression of Tm10BH was all induced by the tested three treatments, implying that Tm10BH was an elicitor-responsive gene. This study provides useful information to further understand induction expression and molecular regulation mechanism of genes

Serial Number: 10/580,507

encoding related enzymes involved in Taxol biosynthesis.

CONCEPT CODE: Genetics - General 03502
Genetics - Plant 03504
Biochemistry studies - Nucleic acids, purines and
pyrimidines 10062
Enzymes - General and comparative studies: coenzymes
10802

INDEX TERMS: Major Concepts
Methods and Techniques; Molecular Genetics (Biochemistry
and Molecular Biophysics)

INDEX TERMS: Chemicals & Biochemicals
open reading frame; cytochrome P450 [EC 1.14.14.1];
complementary DNA [cDNA]; Taxol: biosynthetic pathway

INDEX TERMS: Methods & Equipment
expression profile analysis: laboratory techniques,
genetic techniques

INDEX TERMS: Miscellaneous Descriptors
isoelectric point

ORGANISM: Classifier
Taxopsida 25105
Super Taxa
Gymnospermae; Spermatophyta; Plantae
Organism Name
Taxus media (species): immature
Taxa Notes
Gymnosperms, Plants, Spermatophytes, Vascular Plants

REGISTRY NUMBER: 9035-51-2 (cytochrome P450)
9035-51-2 (EC 1.14.14.1)
~~33069-62-4~~ (Taxol)

GENE NAME: Taxus media Tm10BH gene [Taxus media
5-alpha-taxadienol-10-beta-hydroxylase gene] (Taxopsida)

L621 ANSWER 25 OF 33 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on
STN

ACCESSION NUMBER: 2007:254487 BIOSIS Full-text

DOCUMENT NUMBER: PREV200700276479

TITLE: Potent killing of paclitaxel- and doxorubicin-resistant
breast cancer cell, by calphostin C accompanied by
cytoplasmic vacuolization.

AUTHOR(S): Guo, Baoqing [Reprint Author]; Hembruff,
Stacey L.; Villeneuve, David J.; Kirwan,
Angie F.; Parissenti, Amadeo M.

CORPORATE SOURCE: Northeastern Ontario Reg Canc Ctr, Sudbury, ON, Canada

SOURCE: Proceedings of the American Association for Cancer Research
Annual Meeting, (MAR 2004) Vol. 45, pp. 494.
Meeting Info.: 95th Annual Meeting of the
American-Association-for-Cancer-Research. Orlando, FL, USA.
March 27 -31, 2004. Amer Assoc Canc Res.
ISSN: 0197-016X.

DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 25 Apr 2007
Last Updated on STN: 11 Jul 2007

CONCEPT CODE: General biology - Symposia, transactions and proceedings
00520
Cytology - Human 02508
Biochemistry studies - General 10060
Enzymes - General and comparative studies: coenzymes
10802

Serial Number: 10/580,507

Pathology - Therapy 12512
Reproductive system - Physiology and biochemistry 16504
Pharmacology - General 22002
Pharmacology - Clinical pharmacology 22005
Neoplasms - Pathology, clinical aspects and systemic effects 24004
Neoplasms - Therapeutic agents and therapy 24008

INDEX TERMS: Major Concepts
Pharmacology; Biochemistry and Molecular Biophysics;
Tumor Biology; Reproductive System (Reproduction)

INDEX TERMS: Chemicals & Biochemicals
doxorubicin: antineoplastic-drug; paclitaxel:
antineoplastic-drug; PARP: cleavage; cytochrome c:
release; caspase-8: cleavage; calphostin C:
antineoplastic-drug, enzyme inhibitor-drug,
pharmacodynamics

INDEX TERMS: Miscellaneous Descriptors
cytoplasmic vacuolization

ORGANISM: Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
MCF 7 cell line (cell_line): human breast cancer cells
MCF 7-TAX cell line (cell_line): human
paclitaxel-resistant breast cancer cells
MCF 7-DOX cell line (cell_line): human
doxorubicin-resistant breast cancer cells
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates,
Vertebrates

REGISTRY NUMBER: 23214-92-8 (doxorubicin)
33069-62-4 (paclitaxel)
9007-43-6 (cytochrome c)
179241-78-2 (caspase-8)
121263-19-2 (calphostin C)

L621 ANSWER 26 OF 33 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on
STN

ACCESSION NUMBER: 1999:185190 BIOSIS Full-text
DOCUMENT NUMBER: PREV199900185190
TITLE: Overexpression of Bax alters mechanism of drug-induced cell
death in A253 cells.
AUTHOR(S): Guo, B.; Cao, S.; Yin, M. B.; Toth, Mk.; Rustum,
Y. M.
CORPORATE SOURCE: Grace Cancer Drug Cent., Roswell Park Cancer Inst.,
Buffalo, NY 14263, USA
SOURCE: Proceedings of the American Association for Cancer Research
Annual Meeting, (March, 1999) Vol. 40, pp. 738-739. print.
Meeting Info.: 90th Annual Meeting of the American
Association for Cancer Research. Philadelphia,
Pennsylvania, USA. April 10-14, 1999. American Association
for Cancer Research.
ISSN: 0197-016X.
DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LANGUAGE: English
ENTRY DATE: Entered STN: 5 May 1999
Last Updated on STN: 5 May 1999
CONCEPT CODE: Neoplasms - General 24002

Serial Number: 10/580,507

Cytology - Human 02508
Biochemistry studies - General 10060
Enzymes - General and comparative studies: coenzymes
10802
Pharmacology - General 22002
General biology - Symposia, transactions and proceedings
00520

INDEX TERMS: Major Concepts
Biochemistry and Molecular Biophysics; Cell Biology;
Pharmacology; Tumor Biology

INDEX TERMS: Chemicals & Biochemicals
doxorubicin: antineoplastic-drug; Bax: overexpression;
LV [leucovorin]: antineoplastic-drug; SN-38:
antineoplastic-drug; Taxol: antineoplastic-drug;
Tomudex: antineoplastic-drug, thymidylate synthase
inhibitor; 5-FU [5-fluorouracil]: antineoplastic-drug

INDEX TERMS: Miscellaneous Descriptors
Meeting Abstract

ORGANISM: Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
A253 cell line: drug-induced cell death, human head and
neck squamous cell carcinoma cells
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates,
Vertebrates

ORGANISM: Classifier
Muridae 86375
Super Taxa
Rodentia; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
mouse: nude
Taxa Notes
Animals, Chordates, Mammals, Nonhuman Vertebrates,
Nonhuman Mammals, Rodents, Vertebrates

REGISTRY NUMBER: 23214-92-8 (doxorubicin)
18282-10-5Q (SN-38)
86639-52-3Q (SN-38)
33069-62-4 (Taxol)
112887-68-0 (Tomudex)
51-21-8 (5-FLUOROURACIL)
58-05-9 (LEUCOVORIN)
9031-61-2 (THYMIDYLATE SYNTHASE)

L621 ANSWER 27 OF 33 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on
STN

ACCESSION NUMBER: 1999:191664 BIOSIS Full-text
DOCUMENT NUMBER: PREV199900191664
TITLE: Restoration of paclitaxel (TaxolR, P) induced
chemosensitivity and apoptosis in adriamycin-resistant
MCF-7 breast cancer cells by inhibition of P-glycoprotein
function using SDZ-PSC833.
AUTHOR(S): Chadderton, A.; Villeneuve, D. J.; Gluck, S.;
Parissenti, A. M.
CORPORATE SOURCE: Northeastern Ontario Regional Cancer Cent., Sudbury, ON P3E
5J1, Canada
SOURCE: Proceedings of the American Association for Cancer Research
Annual Meeting, (March, 1999) Vol. 40, pp. 664. print.

Serial Number: 10/580,507

Meeting Info.: 90th Annual Meeting of the American Association for Cancer Research. Philadelphia, Pennsylvania, USA. April 10-14, 1999. American Association for Cancer Research.

ISSN: 0197-016X.

DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 5 May 1999
Last Updated on STN: 5 May 1999

CONCEPT CODE: Pharmacology - General 22002
Cytology - Human 02508
Biochemistry studies - General 10060
Pathology - Therapy 12512
Neoplasms - General 24002
General biology - Symposia, transactions and proceedings 00520

INDEX TERMS: Major Concepts
Pharmacology; Tumor Biology

INDEX TERMS: Chemicals & Biochemicals
adriamycin: antineoplastic-drug; paclitaxel [Taxol-R]:
antineoplastic-drug; P-glycoprotein

INDEX TERMS: Miscellaneous Descriptors
apoptosis; Meeting Abstract

ORGANISM: Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
MCF-7 cell line: human breast cancer
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates,
Vertebrates

REGISTRY NUMBER: 25316-40-9 (adriamycin)
33069-62-4 (paclitaxel)
33069-62-4 (Taxol-R)
121584-18-7 (SDZ-PSC833)

L621 ANSWER 28 OF 33 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on
STN

ACCESSION NUMBER: 1999:234699 BIOSIS Full-text

DOCUMENT NUMBER: PREV199900234699

TITLE: Clinical chemosensitivity of head and neck squamous cell carcinoma (HNSCC) is related to bax:bcl-2 protein expression ratio, but not to mutant p53.

AUTHOR(S): Toth, K.; Schwartz, G.; Vaughan, M. M.; Guo, B.;
Slocum, H. K.; Rustum, Y. M.

CORPORATE SOURCE: Roswell Park Cancer Inst., Buffalo, NY 14263, USA

SOURCE: Proceedings of the American Association for Cancer Research
Annual Meeting, (March, 1999) Vol. 40, pp. 316. print.
Meeting Info.: 90th Annual Meeting of the American Association for Cancer Research. Philadelphia, Pennsylvania, USA. April 10-14, 1999. American Association for Cancer Research.
ISSN: 0197-016X.

DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 17 Jun 1999
Last Updated on STN: 17 Jun 1999

Serial Number: 10/580,507

CONCEPT CODE: Neoplasms - General 24002
Cytology - Human 02508
Genetics - Human 03508
Biochemistry studies - General 10060
Biophysics - General 10502
Metabolism - General metabolism and metabolic pathways
13002
General biology - Symposia, transactions and proceedings
00520

INDEX TERMS: Major Concepts
Biochemistry and Molecular Biophysics; Tumor Biology

INDEX TERMS: Diseases
head and neck squamous cell carcinoma: neoplastic
disease, chemosensitivity
Head and Neck Neoplasms (MeSH); Carcinoma, Squamous Cell
(MeSH)

INDEX TERMS: Chemicals & Biochemicals
bax:bcl-2 protein: expression; bcl-2: expression;
carboplatin: antineoplastic-drug; cisplatin:
antineoplastic-drug; p53 protein: mutant; p53: mutant;
taxol: antineoplastic-drug; 5FU [5-fluorouracil]:
antineoplastic-drug; bax gene; human Bcl-2 gene:
transfection

INDEX TERMS: Miscellaneous Descriptors
Meeting Abstract

ORGANISM: Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
human: patient
A253 cell line
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates,
Vertebrates

REGISTRY NUMBER: 41575-94-4 (carboplatin)
15663-27-1 (cisplatin)
33069-62-4 (taxol)
51-21-8 (5-FLUOROURACIL)

L621 ANSWER 29 OF 33 EMBASE COPYRIGHT (c) 2008 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2007214723 EMBASE Full-text

TITLE: Molecular cloning and heterologous expression of a
10-deacetylbaicatin III-10-O-acetyl transferase cDNA from
Taxus x media.

AUTHOR: Guo, Binhui; Kai, Guoyin; Gong, Yifu; Jin,
Hongbin; Wang, Yechun; Miao, Zhiqi; Tang, Kexuan
(correspondence)

CORPORATE SOURCE: Plant Biotechnology Research Center, School of Life Science
and Technology, Shanghai Jiao Tong University, Shanghai
200030, China. kxtang1@yahoo.com

AUTHOR: Kai, Guoyin

CORPORATE SOURCE: College of Life and Environment Science, Shanghai Normal
University, Shanghai 200234, China.

AUTHOR: Sun, Xiaofen; Tang, Kexuan (correspondence)

CORPORATE SOURCE: State Key Laboratory of Genetic Engineering, School of Life

Serial Number: 10/580,507

Sciences, Fudan University, Shanghai 200433, China.
kxtangl@yahoo.com

SOURCE: Molecular Biology Reports, (Jun 2007) Vol. 34, No. 2, pp. 89-95.

Refs: 22

ISSN: 0301-4851 E-ISSN: 1573-4978 CODEN: MLBRBU

COUNTRY: Netherlands

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 029 Clinical and Experimental Biochemistry

LANGUAGE: English

SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 22 May 2007

Last Updated on STN: 22 May 2007

ABSTRACT: A full-length cDNA encoding 10-deacetylbaaccatin III-10-O-acetyl transferase (designated as TmDBAT), which catalyzes the acetylation of the C-10 hydroxyl group of the advanced metabolite 10-deacetylbaaccatin III (10-DAB) to yield baaccatin III, the immediate diterpenoid precursor of Taxol, was isolated from Taxus x media. Heterologous expression of TmDBAT in E. coli demonstrated that TmDBAT was a functional gene. Tissue expression pattern analysis revealed that TmDBAT expressed strongly in leaves, weak in stems and no expression could be detected in fruits, implying that TmDBAT was tissue-specific. Expression profiling analysis of TmDBAT under different elicitor treatments including silver nitrate, ammonium ceric sulphate and methyl jasmonate indicated that TmDBAT was an elicitor-responsive gene. Southern blot analysis suggested that TmDBAT belonged to a small multigene family. .COPYRG. 2006 Springer Science+Business Media, Inc.

CONTROLLED TERM: Medical Descriptors:
acetylation
article
catalysis
enzyme isolation
Escherichia coli
gene expression profiling
*heterologous expression
*molecular cloning
multigene family
*nucleotide sequence
Southern blotting
Taxus

CONTROLLED TERM: Drug Descriptors:
*10 deacetylbaaccatin iii 10 o acetyltransferase
*acyltransferase
ammonium ceric sulfate
ammonium derivative
*complementary DNA
jasmonic acid
silver nitrate

CAS REGISTRY NO.: (acyltransferase) 9012-30-0, 9054-54-0; (jasmonic acid) 6894-38-8; (silver nitrate) 7761-88-8

GENE NUMBER: GENBANK AY452666 submitted number

L621 ANSWER 30 OF 33 EMBASE COPYRIGHT (c) 2008 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2006483313 EMBASE Full-text

TITLE: Isolation, purification, and biological activities of ray cartilage glycosaminoglycans.

AUTHOR: Guo, Bin (correspondence); Li, Zhi

CORPORATE SOURCE: Department of Ethnopharmacology, Basic Medical College, China Medical University, Shenyang 110001, China.

Serial Number: 10/580,507

 jyguobin@126.com; lizhijia@263.net
AUTHOR: Han, Guan-Ying
CORPORATE SOURCE: Jinzhou Medical College, Jinzhou 121001, China.
SOURCE: Chinese Traditional and Herbal Drugs, (Aug 2006) Vol. 37,
 No. 8, pp. 1210-1214.
 Refs: 4
 ISSN: 0253-2670
COUNTRY: China
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 015 Chest Diseases, Thoracic Surgery and Tuberculosis
 016 Cancer
 029 Clinical and Experimental Biochemistry
 030 Clinical and Experimental Pharmacology
 037 Drug Literature Index
LANGUAGE: Chinese
SUMMARY LANGUAGE: Chinese; English
ENTRY DATE: Entered STN: 24 Oct 2006
 Last Updated on STN: 24 Oct 2006

ABSTRACT: Objective: To explore the methods of extraction, isolation, purification, and biological activities of ray cartilage glycosaminoglycans (RCG). Methods: RCG was purified by guanidine hydrochlorid extraction, acetone fractional precipitation, ultrafiltration, and Sephadex column chromatography. The purity and molecular mass of RCG were measured by means of HPLC. The model of mouse with Lewis lung carcinoma was made, the experimental mice were randomly divided into normal saline group, RCG (500, 250, and 125 mg/kg) groups, and CTX (60 mg/kg) group. Tumor growth states of mice were observed, tumor growth curve was described, inhibitory rates of primary tumor and number of lung metastasis focus were measured; microvessel density (MVD) was quantitated by immunohistochemistry using monoclonal antibodies of CD31; the expression of vascular endothelial growth factor (VEGF) mRNA was determined with RT-PCR. Results: Using HPLC, a single glycosaminoglycans with molecular mass 9.7×10^4 was collected and its purity exceeded ninety-nine percent. Tumor growth curves in RCG groups were smooth compared with saline group. There were significant differences of inhibitory rates of primary tumor, number of lung metastasis focus and MVD between RCG groups and saline group. VEGF mRNA expression levels in RCG groups were reduced significantly compared with saline group. Conclusion: RCG could effectively inhibit the growth and metastasis of primary Lewis lung carcinoma in C57BL/6 mouse and angiogenesis.

CONTROLLED TERM: Medical Descriptors:
 animal experiment
 animal model
 animal tissue
 antiangiogenic activity
 antineoplastic activity
 article
 cancer growth
 cancer inhibition
 column chromatography
 controlled study
 drug efficacy
 drug isolation
 drug purification
 drug purity
 high performance liquid chromatography
 immunohistochemistry
 Lewis carcinoma: DT, drug therapy
 *lung carcinoma: DT, drug therapy
 lung metastasis: CO, complication
 lung metastasis: DT, drug therapy

Serial Number: 10/580,507

molecular weight
mouse
mouse strain
nonhuman
precipitation
protein expression
quantitative analysis
reverse transcription polymerase chain reaction
solvent extraction
tumor vascularization
ultrafiltration

CONTROLLED TERM:

Drug Descriptors:
acetone
cyclophosphamide: CM, drug comparison
cyclophosphamide: DT, drug therapy
cyclophosphamide: PD, pharmacology
*glycosaminoglycan: AN, drug analysis
*glycosaminoglycan: CM, drug comparison
*glycosaminoglycan: DT, drug therapy
*glycosaminoglycan: PD, pharmacology
guanidine
messenger RNA: EC, endogenous compound
monoclonal antibody
sephadex
sodium chloride
vasculotropin: EC, endogenous compound

CAS REGISTRY NO.:

(acetone) 67-64-1; (cyclophosphamide) 50-18-0;
(guanidine) 113-00-8, 25215-10-5, 50-01-1; (sephadex)
11081-40-6, 12774-36-6, 37224-29-6, 9014-76-0, 9041-35-4,
9041-36-5, 9048-71-9, 9050-68-4, 9050-94-6; (sodium
chloride) 7647-14-5; (vasculotropin) 127464-60-2

L621 ANSWER 31 OF 33 EMBASE COPYRIGHT (c) 2008 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2006148023 EMBASE Full-text

TITLE: cDNA microarray analysis of isogenic paclitaxel- and doxorubicin-resistant breast tumor cell lines reveals distinct drug-specific genetic signatures of resistance.

AUTHOR: Villeneuve, David J.; Hembruff, Stacey L.
; Cecchetto, Melanie; Parissenti, Amadeo M.
(correspondence)

CORPORATE SOURCE: Tumor Biology Research Program, Sudbury Regional Hospital, Sudbury, Ont., Canada. aparissenti@hrsrh.on.ca

AUTHOR: Veitch, Zachary; Dew, William A.; Parissenti, Amadeo M. (correspondence)

CORPORATE SOURCE: Department of Biology, Laurentian University, Sudbury, Ont., Canada. aparissenti@hrsrh.on.ca

AUTHOR: Parissenti, Amadeo M. (correspondence)

CORPORATE SOURCE: Division of Medical Sciences, Northern Ontario School of Medicine, Sudbury, Ont., Canada. aparissenti@hrsrh.on.ca

AUTHOR: Parissenti, Amadeo M. (correspondence)

CORPORATE SOURCE: Office of the Chair in Cancer Research, Sudbury Regional Hospital, 41 Ramsey Lake Road, Sudbury, Ont. P3E 5J1, Canada. aparissenti@hrsrh.on.ca

SOURCE: Breast Cancer Research and Treatment, (Mar 2006) Vol. 96, No. 1, pp. 17-39.

Refs: 215

ISSN: 0167-6806 CODEN: BCTRD6

COUNTRY: United States

Serial Number: 10/580,507

DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 016 Cancer
022 Human Genetics
037 Drug Literature Index
005 General Pathology and Pathological Anatomy
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 13 Apr 2006
Last Updated on STN: 13 Apr 2006

ABSTRACT: cDNA microarray analysis is a highly useful tool for the classification of tumors and for prediction of patient prognosis to specific cancers based on this classification. However, to date, there is little evidence that microarray approaches can be used to reliably predict patient response to specific chemotherapy drugs or regimens. This is likely due to an inability to differentiate between genes affecting patient prognosis and genes that play a role in response to specific drugs. Thus, it would be highly useful to identify genes whose expression correlates with tumor cell sensitivity to specific chemotherapy agents in a drug-specific manner. Using cDNA microarray analysis of wildtype MCF-7 breast tumor cells and isogenic ***paclitaxel*** -resistant (MCF-7 (TAX)) or doxorubicin-resistant (MCF-7(DOX)) derivative cell lines, we have uncovered drug-specific changes in gene expression that accompany the establishment of paclitaxel or ***doxorubicin*** resistance. These changes in gene expression were confirmed by quantitative reverse transcription polymerase chain reaction and immunoblotting experiments, with a confirmation rate of approximately 91-95%. The genes identified may prove highly useful for prediction of response to ***paclitaxel*** or doxorubicin in patients with breast cancer. To our knowledge this is the first report of drug-specific genetic signatures of resistance to paclitaxel or doxorubicin, based on a comparison of gene expression between isogenic wildtype and drug-resistant tumor cell lines. Moreover, this study provides significant insight into the wide variety of mechanisms through which resistance to these agents may be acquired in breast cancer. .COPYRG. Springer 2005.

CONTROLLED TERM: Medical Descriptors:
article
*breast adenocarcinoma: DR, drug resistance
*breast adenocarcinoma: ET, etiology
breast cancer: DR, drug resistance
breast cancer: ET, etiology
cancer cell culture
*cancer resistance
cell strain MCF 7
chemotherapy
comparative study
controlled study
correlation analysis
*DNA microarray
drug specificity
gene
gene expression
gene identification
genetics
human
human cell
immunoblotting
prediction
priority journal
quantitative analysis
reverse transcription polymerase chain reaction

Serial Number: 10/580,507

CONTROLLED TERM: sensitivity and specificity
Drug Descriptors:
adriamycin pfs
complementary DNA: EC, endogenous compound
*doxorubicin
*paclitaxel
CAS REGISTRY NO.: (doxorubicin) 23214-92-8, 25316-40-9; (
paclitaxel) 33069-62-4
CHEMICAL NAME: (1) adriamycin pfs; (2) taxol
COMPANY NAME: (1) USP (United States); (2) Bristol Myers Squibb (United
States)

L621 ANSWER 32 OF 33 EMBASE COPYRIGHT (c) 2008 Elsevier B.V. All rights
reserved on STN

ACCESSION NUMBER: 2004400439 EMBASE Full-text
TITLE: The use of DNA microarrays to investigate the
pharmacogenomics of drug response in living systems.
AUTHOR: Villeeuvre, David J.; Parissenti, Amadeo M.
(correspondence)
CORPORATE SOURCE: Research Program, Northeastern Ontario Reg. Cancer Ctr, 41
Ramsey Lake Road, Sudbury, Ont. P3E 5J1, Canada. aparissent
i@hersch.on.ca
AUTHOR: Parissenti, Amadeo M. (correspondence)
CORPORATE SOURCE: Department of Chemistry/Biochemistry, Laurentian
University, Sudbury, Ont. P3E 2C6, Canada. aparissenti@hrsc
h.on.ca
AUTHOR: Parissenti, Amadeo M. (correspondence)
CORPORATE SOURCE: Dept. Biochem. Microbiol./Immunology, University of Ottawa,
Ottawa, Ont. K1H 8M5, Canada. aparissenti@hersch.on.ca
AUTHOR: Parissenti, Amadeo M. (correspondence)
CORPORATE SOURCE: Northeastern Ontario Reg. Cancer Ctr, Research Department,
41 Ramsey Lake Road, Sudbury, Ont. P3E 5J1, Canada.
aparissenti@hersch.on.ca
SOURCE: Current Topics in Medicinal Chemistry, (2004) Vol. 4, No.
13, pp. 1329-1345.
Refs: 50
ISSN: 1568-0266 CODEN: CTMCLL
COUNTRY: Netherlands
DOCUMENT TYPE: Journal; General Review; (Review)
FILE SEGMENT: 016 Cancer
022 Human Genetics
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 7 Oct 2004
Last Updated on STN: 7 Oct 2004

ABSTRACT: With the advent of DNA microarray analysis, it is now possible to
examine the response of virtually the entire human genome to cellular drug
exposure and to uncover a wide variety of genes correlating with the
establishment of drug resistance. This relatively new field of
"pharmacogenomics" is likely to vastly increase our understanding of the
mechanisms of drug action and how cells respond and adapt to drug exposure.
However, DNA microarray studies typically result in the identification of
hundreds of genes that may or may not be of relevance in vivo - particularly
when large, genetically diverse study populations are used. The challenge to
the researcher is to design experimental systems and approaches which minimize
variability in the data, increase the reproducibility amongst experiments,
allow array data from multiple experiments to be assessed by a variety of
statistical, supervised learning, and data clustering approaches. and provide a
clear link between drug response and the expression of specific genes. This

Serial Number: 10/580,507

review provides a description and critical analysis of recent studies on the pharmacogenomics of drug response and discusses current guidelines and approaches for the performance and analysis of DNA microarray experiments in this area. .COPYRGHT. 2004 Bentham Science Publishers Ltd.

CONTROLLED TERM: Medical Descriptors:
calculation
cluster analysis
correlation analysis
*DNA microarray
drug exposure
drug mechanism
*drug response
drug sensitivity
gene expression
gene identification
genetic variability
human
in vivo study
learning
nonhuman
*pharmacogenomics
practice guideline
reproducibility
review
statistical analysis

CONTROLLED TERM: Drug Descriptors:
carboplatin
cisplatin
colecalfiferol
*complementary DNA: EC, endogenous compound
complementary RNA: EC, endogenous compound
cyclophosphamide
docetaxel
doxorubicin
epirubicin
fluorouracil
manganese superoxide dismutase
methotrexate
mitomycin C
mitoxantrone
nimustine
nitrosourea
paclitaxel
raltitrexed
retinoid
selenium
tamoxifen
vinblastine
vincristine

CAS REGISTRY NO.: (carboplatin) 41575-94-4; (cisplatin) 15663-27-1,
26035-31-4, 96081-74-2; (colecalfiferol) 1406-16-2,
67-97-0; (cyclophosphamide) 50-18-0; (docetaxel)
114977-28-5; (doxorubicin) 23214-92-8,
25316-40-9; (epirubicin) 56390-09-1, 56420-45-2;
(fluorouracil) 51-21-8; (methotrexate)
15475-56-6, 59-05-2, 7413-34-5; (mitomycin C) 50-07-7,
74349-48-7; (mitoxantrone) 65271-80-9,
70476-82-3; (nimustine) 42471-28-3, 55661-38-6;
(nitrosourea) 13010-20-3; (paclitaxel)

Serial Number: 10/580,507

33069-62-4; (raltitrexed) 112887-68-0; (selenium)
7782-49-2; (tamoxifen) 10540-29-1; (vinblastine)
865-21-4; (vincristine) 57-22-7

L621 ANSWER 33 OF 33 EMBASE COPYRIGHT (c) 2008 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2002034377 EMBASE Full-text
TITLE: Soluble Fas (CD95) is a prognostic factor in patients with metastatic breast cancer undergoing high-dose chemotherapy and autologous stem cell transplantation.
AUTHOR: Bewick, M. (correspondence); Conlon, M.; Parissenti, A.M.; Lee, H.; Zhang, L.; Gluck, S.; Lafrenie, R.M.
CORPORATE SOURCE: Northeastern Ont. Reg. Cancer Ctr., 41 Ramsey Lake Road, Sudbury, Ont. P3E 5J1, Canada. mbewick@neorcc.on.ca
SOURCE: Journal of Hematotherapy and Stem Cell Research, (2001) Vol. 10, No. 6, pp. 759-768.
Refs: 51
ISSN: 1525-8165 CODEN: JHERFM
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 016 Cancer
025 Hematology
037 Drug Literature Index
005 General Pathology and Pathological Anatomy
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 7 Feb 2002
Last Updated on STN: 7 Feb 2002

ABSTRACT: The Fas/Fas ligand (FasL) system plays an important role in cellular apoptosis and is involved in cancer cell death induced by the immune system and anticancer drugs. Increased serum levels of soluble Fas (sFas) are associated with a number of different disease states and with tumor progression and metastasis in patients. In this study, we examined the plasma levels of sFas in 94 women with metastatic breast cancer undergoing high-dose chemotherapy (HDCT) treatment with autologous stem cell transplantation (ASCT) using a quantitative enzyme-linked immunosorbent assay (ELISA) method. Thirty-one patients (31/94, 33%) had plasma sFas levels greater than the optimum cut point of 1.90 ng/ml (median 2.47, range 1.98-13.54 ng/ml) and were designated as sFas positive. Sixty-three patients (63/94, 67%) had sFas levels below 1.90 ng/ml (median 1.14, range 0.47-1.89 ng/ml). In univariate analysis, patients with sFas-positive status, HER-2 overexpression, and the presence of liver metastases had a significantly shorter time to disease progression (PFS) and significantly decreased overall survival (OS). Multivariable analysis (Cox proportional hazards model) for PFS determined that sFas status significantly predicted disease progression ($p = 0.004$) with an adjusted hazard ratio (HR) of 2.0 (95% CI, 1.3-3.3). HER-2 status and liver metastases were also significant independent predictors of disease progression ($p < 0.001$) for both. sFas level was also an independent prognostic factor for OS with an adjusted HR of 2.0 ($p = 0.006$; 95% CI, 1.2-3.4). HER-2 status and liver metastases also remained highly significant independent prognostic factors for OS (HER-2: $P < 0.001$, HR 2.3, and liver metastases: $P = 0.001$, HR 2.7). In conclusion, these results suggest that plasma levels of sFas may be a valuable clinical prognostic factor in predicting outcome (PFS and OS) for patients with metastatic breast cancer undergoing HDCT with ASCT.

CONTROLLED TERM: Medical Descriptors:
adult
article
*breast metastasis: CO, complication
*breast metastasis: DI, diagnosis

Serial Number: 10/580,507

*breast metastasis: DT, drug therapy

*breast metastasis: ET, etiology

*breast metastasis: TH, therapy

cancer growth

clinical trial

drug megadose

enzyme linked immunosorbent assay

female

human

liver metastasis: CO, complication

liver metastasis: DI, diagnosis

major clinical study

male

priority journal

prognosis

protein blood level

*stem cell transplantation

CONTROLLED TERM:

Drug Descriptors:

cyclophosphamide: DT, drug therapy

cyclophosphamide: IV, intravenous drug

administration

epirubicin: DT, drug therapy

epirubicin: IV, intravenous drug administration

fluorouracil: DT, drug therapy

fluorouracil: IV, intravenous drug administration

recombinant granulocyte colony stimulating factor: DT, drug therapy

CAS REGISTRY NO.:

(cyclophosphamide) 50-18-0; (epirubicin

) 56390-09-1, 56420-45-2; (fluorouracil) 51-21-8;

(recombinant granulocyte colony stimulating factor)
121181-53-1

CHEMICAL NAME:

(1) filgrastim; (2) neupogen

COMPANY NAME:

(1) Amgen (Canada); (2) Amgen (Canada)

Serial Number: 10/580,507

Search History

FILE 'HCAPLUS' ENTERED AT 11:06:52 ON 18 NOV 2008

ACT SRI479HCA1A/A

```
L1 (      1)SEA ABB=ON  PLU=ON  PACLITAXEL/CN
L2 (      1)SEA ABB=ON  PLU=ON  DOXORUBICIN/CN
L3 (      1)SEA ABB=ON  PLU=ON  EPIRUBICIN/CN
L4 (      1)SEA ABB=ON  PLU=ON  IRINOTECAN/CN
L5 (      1)SEA ABB=ON  PLU=ON  VINBLASTINE/CN
L6 (      1)SEA ABB=ON  PLU=ON  METHOTREXATE/CN
L7 (      1)SEA ABB=ON  PLU=ON  CISPLATIN/CN
L8 (      1)SEA ABB=ON  PLU=ON  VALSPODAR/CN
L9 (      1)SEA ABB=ON  PLU=ON  CYCLOPHOSPHAMIDE/CN
L10 (     1)SEA ABB=ON  PLU=ON  MITOXANTRONE/CN
L11 (     1)SEA ABB=ON  PLU=ON  TOPOTECAN/CN
L12 (     1)SEA ABB=ON  PLU=ON  BISANTRENE/CN
L13 (     12)SEA ABB=ON  PLU=ON  (L1 OR L2 OR L3 OR L4 OR L5 OR L6 OR L7 OR
      L8 OR L9 OR L10 OR L11 OR L12)
L14 (     1)SEA ABB=ON  PLU=ON  5-FLUOROURACIL/CN
L15 (     13)SEA ABB=ON  PLU=ON  L13 OR L14
L16 (    92104)SEA ABB=ON  PLU=ON  L15
L17 (     578)SEA ABB=ON  PLU=ON  ISOGENIC (2A)CELL
L18 (     29)SEA ABB=ON  PLU=ON  ISOGENEIC (2A)CELL
L19 (    607)SEA ABB=ON  PLU=ON  L17 OR L18
L20 (     64)SEA ABB=ON  PLU=ON  L16 AND L19
L21 (     44)SEA ABB=ON  PLU=ON  L20 AND (PRY<=2004 OR AY<=2004 OR PY<=2004)

L22 (    74900)SEA ABB=ON  PLU=ON  DRUG RESISTANCE+NT/CT
L23 (      17)SEA ABB=ON  PLU=ON  L21 AND L22
L24 (   10917)SEA ABB=ON  PLU=ON  DRUG RESISTANCE+NT/CT (L) ANTITUMOR
L25 (    4490)SEA ABB=ON  PLU=ON  L16 AND L24
L26 (    2940)SEA ABB=ON  PLU=ON  ANIMAL CELL LINE+NT/CT (L) MCF-7
L27 (     30)SEA ABB=ON  PLU=ON  L25 AND L26
L28 (      1)SEA ABB=ON  PLU=ON  L19 AND L27
L29 (     16)SEA ABB=ON  PLU=ON  L27 AND (PRY<=2004 OR AY<=2004 OR PY<=2004)

L30 (     15)SEA ABB=ON  PLU=ON  L29 NOT L23
L31 (   279735)SEA ABB=ON  PLU=ON  ANTITUMOR AGENTS+OLD/CT
L32 (    4405)SEA ABB=ON  PLU=ON  L25 AND L31
L33 (     19)SEA ABB=ON  PLU=ON  L19 AND L32
L34 (     12)SEA ABB=ON  PLU=ON  L33 AND (PRY<=2004 OR AY<=2004 OR PY<=2004)

L35 (     11)SEA ABB=ON  PLU=ON  L34 NOT L29
L36 (      3)SEA ABB=ON  PLU=ON  L35 AND (BREAST OR STATHMIN OR PROTECTIVE)/
      TI
L37 (      8)SEA ABB=ON  PLU=ON  L30 AND (NUCLEAR OR TUBLIN OR AMPK OR
      CRISIS OR MCF-7 OR PROTEOMICS OR BCL-2)/TI
L38 (     12)SEA ABB=ON  PLU=ON  L28 OR L36 OR L37
L39 (     29)SEA ABB=ON  PLU=ON  L27 AND L31
L40 (     21)SEA ABB=ON  PLU=ON  L39 NOT L38
L41 (      7)SEA ABB=ON  PLU=ON  L40 AND (PRY<=2004 OR AY<=2004 OR PY<=2004)

L42 (      3)SEA ABB=ON  PLU=ON  L41 AND (TUBULIN OR SMAC-PEPTIDES OR
      TRANSPORTER)/TI
L43 (    15)SEA ABB=ON  PLU=ON  L38 OR L42
```

ACT SRI479HCA2A/A

Serial Number: 10/580,507

L44 (1)SEA ABB=ON PLU=ON PACLITAXEL/CN
L45 (1)SEA ABB=ON PLU=ON DOXORUBICIN/CN
L46 (1)SEA ABB=ON PLU=ON EPIRUBICIN/CN
L47 (1)SEA ABB=ON PLU=ON 5-FLUOROURACIL/CN
L48 (1)SEA ABB=ON PLU=ON IRINOTECAN/CN
L49 (1)SEA ABB=ON PLU=ON VINBLASTINE/CN
L50 (1)SEA ABB=ON PLU=ON VINBLASTIN/CN
L51 (1)SEA ABB=ON PLU=ON METHOTREXATE/CN
L52 (1)SEA ABB=ON PLU=ON CISPLATIN/CN
L53 (1)SEA ABB=ON PLU=ON VALSPODAR/CN
L54 (1)SEA ABB=ON PLU=ON CYCLOPHOSPHAMIDE/CN
L55 (1)SEA ABB=ON PLU=ON MITOXANTRONE/CN
L56 (1)SEA ABB=ON PLU=ON TOPOTECAN/CN
L57 (1)SEA ABB=ON PLU=ON BISANTRENE/CN
L58 (13)SEA ABB=ON PLU=ON (L44 OR L45 OR L46 OR L47 OR L48 OR L49 OR
L50 OR L51 OR L52 OR L53 OR L54 OR L55 OR L56 OR L57)
L59 92132 SEA ABB=ON PLU=ON L58

ACT SRI479HCA3A/A

L60 (1)SEA ABB=ON PLU=ON PACLITAXEL/CN
L61 (1)SEA ABB=ON PLU=ON DOXORUBICIN/CN
L62 (1)SEA ABB=ON PLU=ON EPIRUBICIN/CN
L63 (1)SEA ABB=ON PLU=ON 5-FLUOROURACIL/CN
L64 (1)SEA ABB=ON PLU=ON IRINOTECAN/CN
L65 (1)SEA ABB=ON PLU=ON VINBLASTINE/CN
L66 (1)SEA ABB=ON PLU=ON VINBLASTIN/CN
L67 (1)SEA ABB=ON PLU=ON METHOTREXATE/CN
L68 (1)SEA ABB=ON PLU=ON CISPLATIN/CN
L69 (1)SEA ABB=ON PLU=ON VALSPODAR/CN
L70 (1)SEA ABB=ON PLU=ON CYCLOPHOSPHAMIDE/CN
L71 (1)SEA ABB=ON PLU=ON MITOXANTRONE/CN
L72 (1)SEA ABB=ON PLU=ON TOPOTECAN/CN
L73 (1)SEA ABB=ON PLU=ON BISANTRENE/CN
L74 (13)SEA ABB=ON PLU=ON (L60 OR L61 OR L62 OR L63 OR L64 OR L65 OR
L66 OR L67 OR L68 OR L69 OR L70 OR L71 OR L72 OR L73)
L75 (92132)SEA ABB=ON PLU=ON L74
L76 (608)SEA ABB=ON PLU=ON (ISOGENIC OR ISOGENEIC) (2A)CELL
L77 (15)SEA ABB=ON PLU=ON (ISOGENEIC OR ISOGENIC) (A) TRANSPLANTATION

L78 (64)SEA ABB=ON PLU=ON L75 AND (L76 OR L77)
L79 (44)SEA ABB=ON PLU=ON L78 AND (PRY<=2004 OR AY<=2004 OR PY<=2004)

L80 (74935)SEA ABB=ON PLU=ON DRUG RESISTANCE+NT/CT
L81 (17)SEA ABB=ON PLU=ON L79 AND L80
L82 4 SEA ABB=ON PLU=ON L81 AND (CHEMOTHERAPEUTIC OR STATHMIN OR
MAMMARY OR EXPOSURE) /TI

ACT SRI479HCA1AU/A

L83 (1)SEA ABB=ON PLU=ON PACLITAXEL/CN
L84 (1)SEA ABB=ON PLU=ON DOXORUBICIN/CN
L85 (1)SEA ABB=ON PLU=ON EPIRUBICIN/CN
L86 (1)SEA ABB=ON PLU=ON IRINOTECAN/CN
L87 (1)SEA ABB=ON PLU=ON VINBLASTINE/CN
L88 (1)SEA ABB=ON PLU=ON METHOTREXATE/CN
L89 (1)SEA ABB=ON PLU=ON CISPLATIN/CN
L90 (1)SEA ABB=ON PLU=ON VALSPODAR/CN
L91 (1)SEA ABB=ON PLU=ON CYCLOPHOSPHAMIDE/CN
L92 (1)SEA ABB=ON PLU=ON MITOXANTRONE/CN

Serial Number: 10/580,507

L93 (1)SEA ABB=ON PLU=ON TOPOTECAN/CN
L94 (1)SEA ABB=ON PLU=ON BISANTRENE/CN
L95 (12)SEA ABB=ON PLU=ON (L83 OR L84 OR L85 OR L86 OR L87 OR L88 OR
L89 OR L90 OR L91 OR L92 OR L93 OR L94)
L96 (1)SEA ABB=ON PLU=ON 5-FLUOROURACIL/CN
L97 (13)SEA ABB=ON PLU=ON L95 OR L96
L98 (92104)SEA ABB=ON PLU=ON L97
L99 (32)SEA ABB=ON PLU=ON PARISSENTI A?/AU
L100 (2209)SEA FILE=HCAPLUS ABB=ON PLU=ON GUO, B?/AU
L101 (401)SEA FILE=HCAPLUS ABB=ON PLU=ON VILLENEUVE, D?/AU
L102 (7)SEA FILE=HCAPLUS ABB=ON PLU=ON HEMBRUFF S?/AU
L103 (2625)SEA FILE=HCAPLUS ABB=ON PLU=ON (L99 OR L100 OR L101 OR L102)
L104 (20)SEA FILE=HCAPLUS ABB=ON PLU=ON L98 AND L103
L*** DEL 12 SEA FILE=HCAPLUS ABB=ON PLU=ON L104 AND (PRY<=2004 OR AY<=200

FILE 'MEDLINE' ENTERED AT 11:24:01 ON 18 NOV 2008
ACT SRI479MED1A/A

L105 (1)SEA FILE=REGISTRY ABB=ON PLU=ON PACLITAXEL/CN
L106 (1)SEA FILE=REGISTRY ABB=ON PLU=ON DOXORUBICIN/CN
L107 (1)SEA FILE=REGISTRY ABB=ON PLU=ON EPIRUBICIN/CN
L108 (1)SEA FILE=REGISTRY ABB=ON PLU=ON 5-FLUOROURACIL/CN
L109 (1)SEA FILE=REGISTRY ABB=ON PLU=ON IRINOTECAN/CN
L110 (1)SEA FILE=REGISTRY ABB=ON PLU=ON VINBLASTINE/CN
L111 (1)SEA FILE=REGISTRY ABB=ON PLU=ON VINBLASTIN/CN
L112 (1)SEA FILE=REGISTRY ABB=ON PLU=ON METHOTREXATE/CN
L113 (1)SEA FILE=REGISTRY ABB=ON PLU=ON CISPLATIN/CN
L114 (1)SEA FILE=REGISTRY ABB=ON PLU=ON VALSPODAR/CN
L115 (1)SEA FILE=REGISTRY ABB=ON PLU=ON CYCLOPHOSPHAMIDE/CN
L116 (1)SEA FILE=REGISTRY ABB=ON PLU=ON MITOXANTRONE/CN
L117 (1)SEA FILE=REGISTRY ABB=ON PLU=ON TOPOTECAN/CN
L118 (1)SEA FILE=REGISTRY ABB=ON PLU=ON BISANTRENE/CN
L119 (13)SEA FILE=REGISTRY ABB=ON PLU=ON (L105 OR L106 OR L107 OR L108
L120 (138826)SEA FILE=MEDLINE ABB=ON PLU=ON L119
L121 (602)SEA FILE=MEDLINE ABB=ON PLU=ON (ISOGENIC OR ISOGENEIC) (2A)CEL
L122 (177085)SEA FILE=MEDLINE ABB=ON PLU=ON DRUG RESISTANCE+NT/CT
L123 (10163)SEA FILE=MEDLINE ABB=ON PLU=ON L120 AND L122
L124 (24902)SEA FILE=MEDLINE ABB=ON PLU=ON BREAST+NT/CT
L125 (12)SEA FILE=MEDLINE ABB=ON PLU=ON L123 AND L124
L126 (157270)SEA FILE=MEDLINE ABB=ON PLU=ON BREAST NEOPLASMS+NT/CT
L127 (53)SEA FILE=MEDLINE ABB=ON PLU=ON L120 AND L121
L128 (5)SEA FILE=MEDLINE ABB=ON PLU=ON L126 AND L127
L129 (5)SEA FILE=MEDLINE ABB=ON PLU=ON L128 NOT L125
L130 (3)SEA FILE=MEDLINE ABB=ON PLU=ON L129 AND (MICROARRAY OR CROSS-
L131 (2)SEA FILE=MEDLINE ABB=ON PLU=ON L130 NOT OPTIMIZATION
L132 (663791)SEA FILE=MEDLINE ABB=ON PLU=ON IN VITRO
L133 (8)SEA FILE=MEDLINE ABB=ON PLU=ON L127 AND L132
L134 (1)SEA FILE=MEDLINE ABB=ON PLU=ON L133 AND XENOGRAFT/TI
L135 (15)SEA FILE=MEDLINE ABB=ON PLU=ON L121 AND L123
L136 (8)SEA FILE=MEDLINE ABB=ON PLU=ON L135 AND PY<=2004
L137 (2)SEA FILE=MEDLINE ABB=ON PLU=ON L136 AND EVIDENCE/TI
L138 (1)SEA FILE=MEDLINE ABB=ON PLU=ON L137 NOT MYELOMA/TI
L139 3 SEA ABB=ON PLU=ON L131 OR L134 OR L138

Serial Number: 10/580,507

FILE 'BIOSIS' ENTERED AT 11:24:48 ON 18 NOV 2008

ACT SRI479BIO1A/A

```
-----
L140(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  PACLITAXEL/CN
L141(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  DOXORUBICIN/CN
L142(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  EPIRUBICIN/CN
L143(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  5-FLUOROURACIL/CN
L144(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  IRINOTECAN/CN
L145(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  VINBLASTINE/CN
L146(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  VINBLASTIN/CN
L147(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  METHOTREXATE/CN
L148(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  CISPLATIN/CN
L149(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  VALSPODAR/CN
L150(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  CYCLOPHOSPHAMIDE/CN
L151(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  MITOXANTRONE/CN
L152(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  TOPOTECAN/CN
L153(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  BISANTRENE/CN
L154(     13)SEA FILE=REGISTRY ABB=ON  PLU=ON  (L140 OR L141 OR L142 OR L143
L155( 163678)SEA FILE=BIOSIS ABB=ON  PLU=ON  L154
L156(     884)SEA FILE=BIOSIS ABB=ON  PLU=ON  ISOGENIC (5A)CELL
L157(    461)SEA FILE=BIOSIS ABB=ON  PLU=ON  DRUG RESISTANCE/CT
L158(     62)SEA FILE=BIOSIS ABB=ON  PLU=ON  L155 AND L156
L159( 109571)SEA FILE=BIOSIS ABB=ON  PLU=ON  NEOPLASMS/CT
L160(      7)SEA FILE=BIOSIS ABB=ON  PLU=ON  L158 AND L159
L161(   72513)SEA FILE=BIOSIS ABB=ON  PLU=ON  BREAST NEOPLASMS/CT
L162(      4)SEA FILE=BIOSIS ABB=ON  PLU=ON  L158 AND L161
L163(      4)SEA FILE=BIOSIS ABB=ON  PLU=ON  L162 NOT L160
L164(   42386)SEA FILE=BIOSIS ABB=ON  PLU=ON  DRUG RESISTANCE
L165(   42386)SEA FILE=BIOSIS ABB=ON  PLU=ON  L157 OR L164
L166(  475611)SEA FILE=BIOSIS ABB=ON  PLU=ON  NEOPLASM
L167(   57579)SEA FILE=BIOSIS ABB=ON  PLU=ON  CYST OR NEOPLASTIC PROCESSES OR
L168(  529702)SEA FILE=BIOSIS ABB=ON  PLU=ON  L166 OR L167
L169(   3716)SEA FILE=BIOSIS ABB=ON  PLU=ON  L165 AND L168
L170(   1420)SEA FILE=BIOSIS ABB=ON  PLU=ON  L155 AND L169
L171(      4)SEA FILE=BIOSIS ABB=ON  PLU=ON  L156 AND L170
L172(      2)SEA FILE=BIOSIS ABB=ON  PLU=ON  L171 AND (ESTROGEN OR OVEREXPRE
L173(   74456)SEA FILE=BIOSIS ABB=ON  PLU=ON  ADENOCARCINOMA
L174(   72850)SEA FILE=BIOSIS ABB=ON  PLU=ON  BREAST NEOPLASM
L175(   2444)SEA FILE=BIOSIS ABB=ON  PLU=ON  UTERINE NEOPLASM
L176(   282)SEA FILE=BIOSIS ABB=ON  PLU=ON  L170 AND L174
L177(      2)SEA FILE=BIOSIS ABB=ON  PLU=ON  L176 AND ISOGENIC
L178(      1)SEA FILE=BIOSIS ABB=ON  PLU=ON  L176 AND L156
L179(      2)SEA FILE=BIOSIS ABB=ON  PLU=ON  L177 OR L178
L180(      2)SEA FILE=BIOSIS ABB=ON  PLU=ON  L170 AND L175
L181(      2)SEA FILE=BIOSIS ABB=ON  PLU=ON  L180 NOT L179
L182(     28)SEA FILE=BIOSIS ABB=ON  PLU=ON  L156 AND L173
L183(     28)SEA FILE=BIOSIS ABB=ON  PLU=ON  L182 NOT (L172 OR L179 OR L180
L184(      2)SEA FILE=BIOSIS ABB=ON  PLU=ON  L165 AND L183
L185(      2)SEA FILE=BIOSIS ABB=ON  PLU=ON  L184 NOT (L172 OR L179 OR L180
L186(      1)SEA FILE=BIOSIS ABB=ON  PLU=ON  L185 AND INDUCTION/TI
L187(      6)SEA FILE=BIOSIS ABB=ON  PLU=ON  L172 OR L179 OR L180 OR L181 OR
L188(   16)SEA ABB=ON  PLU=ON  L160 OR L163 OR L187
-----
```

ACT SRI479BIO2A/A

```
-----
L189(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  PACLITAXEL/CN
L190(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  DOXORUBICIN/CN
L191(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  EPIRUBICIN/CN
L192(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  5-FLUOROURACIL/CN
L193(      1)SEA FILE=REGISTRY ABB=ON  PLU=ON  IRINOTECAN/CN
```

Serial Number: 10/580,507

L194(1)SEA FILE=REGISTRY ABB=ON PLU=ON VINBLASTINE/CN
L195(1)SEA FILE=REGISTRY ABB=ON PLU=ON VINBLASTIN/CN
L196(1)SEA FILE=REGISTRY ABB=ON PLU=ON METHOTREXATE/CN
L197(1)SEA FILE=REGISTRY ABB=ON PLU=ON CISPLATIN/CN
L198(1)SEA FILE=REGISTRY ABB=ON PLU=ON VALSPODAR/CN
L199(1)SEA FILE=REGISTRY ABB=ON PLU=ON CYCLOPHOSPHAMIDE/CN
L200(1)SEA FILE=REGISTRY ABB=ON PLU=ON MITOXANTRONE/CN
L201(1)SEA FILE=REGISTRY ABB=ON PLU=ON TOPOTECAN/CN
L202(1)SEA FILE=REGISTRY ABB=ON PLU=ON BISANTRENE/CN
L203(13)SEA FILE=REGISTRY ABB=ON PLU=ON (L189 OR L190 OR L191 OR L192
L204(163678)SEA FILE=BIOSIS ABB=ON PLU=ON L203
L205(884)SEA FILE=BIOSIS ABB=ON PLU=ON ISOGENIC (5A)CELL
L206(461)SEA FILE=BIOSIS ABB=ON PLU=ON DRUG RESISTANCE/CT
L207(62)SEA FILE=BIOSIS ABB=ON PLU=ON L204 AND L205
L208(109571)SEA FILE=BIOSIS ABB=ON PLU=ON NEOPLASMS/CT
L209(7)SEA FILE=BIOSIS ABB=ON PLU=ON L207 AND L208
L210(72513)SEA FILE=BIOSIS ABB=ON PLU=ON BREAST NEOPLASMS/CT
L211(4)SEA FILE=BIOSIS ABB=ON PLU=ON L207 AND L210
L212(4)SEA FILE=BIOSIS ABB=ON PLU=ON L211 NOT L209
L213(42386)SEA FILE=BIOSIS ABB=ON PLU=ON DRUG RESISTANCE
L214(42386)SEA FILE=BIOSIS ABB=ON PLU=ON L206 OR L213
L215(475611)SEA FILE=BIOSIS ABB=ON PLU=ON NEOPLASM
L216(57579)SEA FILE=BIOSIS ABB=ON PLU=ON CYST OR NEOPLASTIC PROCESSES OR
L217(529702)SEA FILE=BIOSIS ABB=ON PLU=ON L215 OR L216
L218(3716)SEA FILE=BIOSIS ABB=ON PLU=ON L214 AND L217
L219(1420)SEA FILE=BIOSIS ABB=ON PLU=ON L204 AND L218
L220(4)SEA FILE=BIOSIS ABB=ON PLU=ON L205 AND L219
L221(2)SEA FILE=BIOSIS ABB=ON PLU=ON L220 AND (ESTROGEN OR OVEREXPRES
L222(74456)SEA FILE=BIOSIS ABB=ON PLU=ON ADENOCARCINOMA
L223(72850)SEA FILE=BIOSIS ABB=ON PLU=ON BREAST NEOPLASM
L224(2444)SEA FILE=BIOSIS ABB=ON PLU=ON UTERINE NEOPLASM
L225(282)SEA FILE=BIOSIS ABB=ON PLU=ON L219 AND L223
L226(2)SEA FILE=BIOSIS ABB=ON PLU=ON L225 AND ISOGENIC
L227(1)SEA FILE=BIOSIS ABB=ON PLU=ON L225 AND L205
L228(2)SEA FILE=BIOSIS ABB=ON PLU=ON L226 OR L227
L229(2)SEA FILE=BIOSIS ABB=ON PLU=ON L219 AND L224
L230(2)SEA FILE=BIOSIS ABB=ON PLU=ON L229 NOT L228
L231(28)SEA FILE=BIOSIS ABB=ON PLU=ON L205 AND L222
L232(28)SEA FILE=BIOSIS ABB=ON PLU=ON L231 NOT (L221 OR L228 OR L229
L233(2)SEA FILE=BIOSIS ABB=ON PLU=ON L214 AND L232
L234(2)SEA FILE=BIOSIS ABB=ON PLU=ON L233 NOT (L221 OR L228 OR L229
L235(1)SEA FILE=BIOSIS ABB=ON PLU=ON L234 AND INDUCTION/TI
L236(6)SEA FILE=BIOSIS ABB=ON PLU=ON L221 OR L228 OR L229 OR L230 OR
L237(16)SEA FILE=BIOSIS ABB=ON PLU=ON L209 OR L212 OR L236
L238(137117)SEA FILE=BIOSIS ABB=ON PLU=ON CLONE
L239(52)SEA FILE=BIOSIS ABB=ON PLU=ON L205 AND L238
L240(3)SEA FILE=BIOSIS ABB=ON PLU=ON L204 AND L239
L241(3)SEA FILE=BIOSIS ABB=ON PLU=ON L240 NOT L237
L242 19 SEA ABB=ON PLU=ON L237 OR L241

ACT SRI479BIO3A/A

L243(1)SEA FILE=REGISTRY ABB=ON PLU=ON PACLITAXEL/CN
L244(1)SEA FILE=REGISTRY ABB=ON PLU=ON DOXORUBICIN/CN
L245(1)SEA FILE=REGISTRY ABB=ON PLU=ON EPIRUBICIN/CN
L246(1)SEA FILE=REGISTRY ABB=ON PLU=ON 5-FLUOROURACIL/CN
L247(1)SEA FILE=REGISTRY ABB=ON PLU=ON IRINOTECAN/CN
L248(1)SEA FILE=REGISTRY ABB=ON PLU=ON VINBLASTINE/CN
L249(1)SEA FILE=REGISTRY ABB=ON PLU=ON VINBLASTIN/CN
L250(1)SEA FILE=REGISTRY ABB=ON PLU=ON METHOTREXATE/CN

Serial Number: 10/580,507

L251(1)SEA FILE=REGISTRY ABB=ON PLU=ON CISPLATIN/CN
 L252(1)SEA FILE=REGISTRY ABB=ON PLU=ON VALSPODAR/CN
 L253(1)SEA FILE=REGISTRY ABB=ON PLU=ON CYCLOPHOSPHAMIDE/CN
 L254(1)SEA FILE=REGISTRY ABB=ON PLU=ON MITOXANTRONE/CN
 L255(1)SEA FILE=REGISTRY ABB=ON PLU=ON TOPOTECAN/CN
 L256(1)SEA FILE=REGISTRY ABB=ON PLU=ON BISANTRENE/CN
 L257(13)SEA FILE=REGISTRY ABB=ON PLU=ON (L243 OR L244 OR L245 OR L246
 L258(163678)SEA FILE=BIOSIS ABB=ON PLU=ON L257
 L259(884)SEA FILE=BIOSIS ABB=ON PLU=ON ISOGENIC (5A)CELL
 L260(461)SEA FILE=BIOSIS ABB=ON PLU=ON DRUG RESISTANCE/CT
 L261(62)SEA FILE=BIOSIS ABB=ON PLU=ON L258 AND L259
 L262(109571)SEA FILE=BIOSIS ABB=ON PLU=ON NEOPLASMS/CT
 L263(7)SEA FILE=BIOSIS ABB=ON PLU=ON L261 AND L262
 L264(72513)SEA FILE=BIOSIS ABB=ON PLU=ON BREAST NEOPLASMS/CT
 L265(4)SEA FILE=BIOSIS ABB=ON PLU=ON L261 AND L264
 L266(4)SEA FILE=BIOSIS ABB=ON PLU=ON L265 NOT L263
 L267(42386)SEA FILE=BIOSIS ABB=ON PLU=ON DRUG RESISTANCE
 L268(42386)SEA FILE=BIOSIS ABB=ON PLU=ON L260 OR L267
 L269(475611)SEA FILE=BIOSIS ABB=ON PLU=ON NEOPLASM
 L270(57579)SEA FILE=BIOSIS ABB=ON PLU=ON CYST OR NEOPLASTIC PROCESSES OR
 L271(529702)SEA FILE=BIOSIS ABB=ON PLU=ON L269 OR L270
 L272(3716)SEA FILE=BIOSIS ABB=ON PLU=ON L268 AND L271
 L273(1420)SEA FILE=BIOSIS ABB=ON PLU=ON L258 AND L272
 L274(4)SEA FILE=BIOSIS ABB=ON PLU=ON L259 AND L273
 L275(2)SEA FILE=BIOSIS ABB=ON PLU=ON L274 AND (ESTROGEN OR OVEREXPRE
 L276(74456)SEA FILE=BIOSIS ABB=ON PLU=ON ADENOCARCINOMA
 L277(72850)SEA FILE=BIOSIS ABB=ON PLU=ON BREAST NEOPLASM
 L278(2444)SEA FILE=BIOSIS ABB=ON PLU=ON UTERINE NEOPLASM
 L279(282)SEA FILE=BIOSIS ABB=ON PLU=ON L273 AND L277
 L280(2)SEA FILE=BIOSIS ABB=ON PLU=ON L279 AND ISOGENIC
 L281(1)SEA FILE=BIOSIS ABB=ON PLU=ON L279 AND L259
 L282(2)SEA FILE=BIOSIS ABB=ON PLU=ON L280 OR L281
 L283(2)SEA FILE=BIOSIS ABB=ON PLU=ON L273 AND L278
 L284(2)SEA FILE=BIOSIS ABB=ON PLU=ON L283 NOT L282
 L285(28)SEA FILE=BIOSIS ABB=ON PLU=ON L259 AND L276
 L286(28)SEA FILE=BIOSIS ABB=ON PLU=ON L285 NOT (L275 OR L282 OR L283
 L287(2)SEA FILE=BIOSIS ABB=ON PLU=ON L268 AND L286
 L288(2)SEA FILE=BIOSIS ABB=ON PLU=ON L287 NOT (L275 OR L282 OR L283
 L289(1)SEA FILE=BIOSIS ABB=ON PLU=ON L288 AND INDUCTION/TI
 L290(6)SEA FILE=BIOSIS ABB=ON PLU=ON L275 OR L282 OR L283 OR L284 OR
 L291(16)SEA FILE=BIOSIS ABB=ON PLU=ON L263 OR L266 OR L290
 L292(17723)SEA FILE=BIOSIS ABB=ON PLU=ON PACLITAXEL OR 7 EPI TAXOL OR AN
 L293(45461)SEA FILE=BIOSIS ABB=ON PLU=ON DOXORUBICIN OR ADRIABLASTIN OR
 L294(544)SEA FILE=BIOSIS ABB=ON PLU=ON (DOXORUBICIN (2A) (HEXAL OR NC
 L295(45473)SEA FILE=BIOSIS ABB=ON PLU=ON L293 OR L294
 L296(4888)SEA FILE=BIOSIS ABB=ON PLU=ON EPIRUBICIN OR (EPI (2A) (ADRIAM
 L297(29206)SEA FILE=BIOSIS ABB=ON PLU=ON FLUOROURACIL OR FLUOROURACIL-BI
 L298(0)SEA FILE=BIOSIS ABB=ON PLU=ON (FLUOROURACIL (2A) (GRY OR DAKO
 L299(3404)SEA FILE=BIOSIS ABB=ON PLU=ON IRINOTECAN OR CAMPTOSAR OR CAMP
 L300(12050)SEA FILE=BIOSIS ABB=ON PLU=ON VINBLASTINE OR CELLBLASTIN OR V
 L301(36566)SEA FILE=BIOSIS ABB=ON PLU=ON METHOTREXATE OR AMETHOPTERIN OR
 L302(34536)SEA FILE=BIOSIS ABB=ON PLU=ON CISPLATIN OR BIOCISPLATINUM OR
 L303(742)SEA FILE=BIOSIS ABB=ON PLU=ON VALSPODAR OR KETO BMT 1 VAL 2 C
 L304(48264)SEA FILE=BIOSIS ABB=ON PLU=ON CYCLOPHOSPHAMIDE OR CYCLOPHOSPH
 L305(5668)SEA FILE=BIOSIS ABB=ON PLU=ON MITOXANTRONE OR MITOXANTRONE (2
 L306(2060)SEA FILE=BIOSIS ABB=ON PLU=ON TOPOTECAN OR HYCAMTAMINE OR HYC
 L307(189)SEA FILE=BIOSIS ABB=ON PLU=ON BISANTRENE OR BISANTRENE DIHYDR
 L308(176937)SEA FILE=BIOSIS ABB=ON PLU=ON (L292 OR L293 OR L294 OR L295 O
 L309(1150)SEA FILE=BIOSIS ABB=ON PLU=ON (ISOGENIC OR ISOGENEIC) (7A) CE
 L310(91)SEA FILE=BIOSIS ABB=ON PLU=ON L308 AND L309

Serial Number: 10/580,507

L311(42386)SEA FILE=BIOSIS ABB=ON PLU=ON DRUG RESISTANCE
L312(19)SEA FILE=BIOSIS ABB=ON PLU=ON L310 AND L311
L313(12)SEA FILE=BIOSIS ABB=ON PLU=ON L312 AND PY<=2004
L314(9)SEA FILE=BIOSIS ABB=ON PLU=ON L313 NOT L291
L315(165905)SEA FILE=BIOSIS ABB=ON PLU=ON (BREAST OR MAMMARY) (2A) (NEOPL
L316(40685)SEA FILE=BIOSIS ABB=ON PLU=ON (UTERINE OR ENDOMETRIAL OR CERV
L317(2)SEA FILE=BIOSIS ABB=ON PLU=ON L314 AND (L315 OR L316)
L318(18)SEA FILE=BIOSIS ABB=ON PLU=ON L291 OR L317
L319(365329)SEA FILE=BIOSIS ABB=ON PLU=ON ANTITUMOR OR ANTICANCER OR ANTI
L320(165)SEA FILE=BIOSIS ABB=ON PLU=ON L309 AND L319
L321(70)SEA FILE=BIOSIS ABB=ON PLU=ON L308 AND L320
L322(12)SEA FILE=BIOSIS ABB=ON PLU=ON L321 AND (L315 OR L316)
L323(10)SEA FILE=BIOSIS ABB=ON PLU=ON L322 NOT L313
L324(5)SEA FILE=BIOSIS ABB=ON PLU=ON L323 NOT L291
L325 23 SEA ABB=ON PLU=ON L324 OR L318

L326 26 SEA ABB=ON PLU=ON L188 OR L242 OR L325

FILE 'EMBASE' ENTERED AT 11:31:13 ON 18 NOV 2008
ACT SRI479EMB2A/A

L327(1)SEA FILE=REGISTRY ABB=ON PLU=ON PACLITAXEL/CN
L328(1)SEA FILE=REGISTRY ABB=ON PLU=ON DOXORUBICIN/CN
L329(1)SEA FILE=REGISTRY ABB=ON PLU=ON EPIRUBICIN/CN
L330(1)SEA FILE=REGISTRY ABB=ON PLU=ON 5-FLUOROURACIL/CN
L331(1)SEA FILE=REGISTRY ABB=ON PLU=ON IRINOTECAN/CN
L332(1)SEA FILE=REGISTRY ABB=ON PLU=ON VINBLASTINE/CN
L333(1)SEA FILE=REGISTRY ABB=ON PLU=ON VINBLASTIN/CN
L334(1)SEA FILE=REGISTRY ABB=ON PLU=ON METHOTREXATE/CN
L335(1)SEA FILE=REGISTRY ABB=ON PLU=ON CISPLATIN/CN
L336(1)SEA FILE=REGISTRY ABB=ON PLU=ON VALSPODAR/CN
L337(1)SEA FILE=REGISTRY ABB=ON PLU=ON CYCLOPHOSPHAMIDE/CN
L338(1)SEA FILE=REGISTRY ABB=ON PLU=ON MITOXANTRONE/CN
L339(1)SEA FILE=REGISTRY ABB=ON PLU=ON TOPOTECAN/CN
L340(1)SEA FILE=REGISTRY ABB=ON PLU=ON BISANTRENE/CN
L341(13)SEA FILE=REGISTRY ABB=ON PLU=ON (L327 OR L328 OR L329 OR L330
L342(288235)SEA FILE=EMBASE ABB=ON PLU=ON L341
L343(927)SEA FILE=EMBASE ABB=ON PLU=ON (ISOGENIC OR ISOGENEIC) (7A)CELL
L344(139079)SEA FILE=EMBASE ABB=ON PLU=ON DRUG RESISTANCE+NT/CT
L345(1576209)SEA FILE=EMBASE ABB=ON PLU=ON NEOPLASM+NT/CT
L346(89)SEA FILE=EMBASE ABB=ON PLU=ON L342 AND L343
L347(16)SEA FILE=EMBASE ABB=ON PLU=ON L346 AND L344
L348(13)SEA FILE=EMBASE ABB=ON PLU=ON L347 AND L345
L349(9)SEA FILE=EMBASE ABB=ON PLU=ON L348 AND PY<=2004
L350 3 SEA ABB=ON PLU=ON L349 AND (RECENT OR UROEPITHELIAL OR
LOSS)/TI

ACT SRI479EMB3A/A

L351(1)SEA FILE=REGISTRY ABB=ON PLU=ON PACLITAXEL/CN
L352(1)SEA FILE=REGISTRY ABB=ON PLU=ON DOXORUBICIN/CN
L353(1)SEA FILE=REGISTRY ABB=ON PLU=ON EPIRUBICIN/CN
L354(1)SEA FILE=REGISTRY ABB=ON PLU=ON 5-FLUOROURACIL/CN
L355(1)SEA FILE=REGISTRY ABB=ON PLU=ON IRINOTECAN/CN
L356(1)SEA FILE=REGISTRY ABB=ON PLU=ON VINBLASTINE/CN
L357(1)SEA FILE=REGISTRY ABB=ON PLU=ON VINBLASTIN/CN
L358(1)SEA FILE=REGISTRY ABB=ON PLU=ON METHOTREXATE/CN
L359(1)SEA FILE=REGISTRY ABB=ON PLU=ON CISPLATIN/CN
L360(1)SEA FILE=REGISTRY ABB=ON PLU=ON VALSPODAR/CN
L361(1)SEA FILE=REGISTRY ABB=ON PLU=ON CYCLOPHOSPHAMIDE/CN

Serial Number: 10/580,507

L362(1)SEA FILE=REGISTRY ABB=ON PLU=ON MITOXANTRONE/CN
L363(1)SEA FILE=REGISTRY ABB=ON PLU=ON TOPOTECAN/CN
L364(1)SEA FILE=REGISTRY ABB=ON PLU=ON BISANTRENE/CN
L365(13)SEA FILE=REGISTRY ABB=ON PLU=ON (L351 OR L352 OR L353 OR L354
L366(288235)SEA FILE=EMBASE ABB=ON PLU=ON L365
L367(927)SEA FILE=EMBASE ABB=ON PLU=ON (ISOGENIC OR ISOGENEIC) (7A)CELL
L368(139079)SEA FILE=EMBASE ABB=ON PLU=ON DRUG RESISTANCE+NT/CT
L369(1576209)SEA FILE=EMBASE ABB=ON PLU=ON NEOPLASM+NT/CT
L370(89)SEA FILE=EMBASE ABB=ON PLU=ON L366 AND L367
L371(16)SEA FILE=EMBASE ABB=ON PLU=ON L370 AND L368
L372(13)SEA FILE=EMBASE ABB=ON PLU=ON L371 AND L369
L373(9)SEA FILE=EMBASE ABB=ON PLU=ON L372 AND PY<=2004
L374(3)SEA FILE=EMBASE ABB=ON PLU=ON L373 AND (RECENT OR UROEPITHELI
L375(158539)SEA FILE=EMBASE ABB=ON PLU=ON (BREAST OR MAMMARY) (2A) (NEOPL
L376(35856)SEA FILE=EMBASE ABB=ON PLU=ON (UTERINE OR ENDOMETRIAL OR CERV
L377(164648)SEA FILE=EMBASE ABB=ON PLU=ON ANTITUMOR OR ANTICANCER OR ANTI
L378(927)SEA FILE=EMBASE ABB=ON PLU=ON (ISOGENIC OR ISOGENEIC) (7A)CELL
L379(61)SEA FILE=EMBASE ABB=ON PLU=ON L378 AND (L375 OR L376)
L380(8)SEA FILE=EMBASE ABB=ON PLU=ON L379 AND L377
L381(3)SEA FILE=EMBASE ABB=ON PLU=ON L380 NOT (PTEN OR NOVEL OR CHAL
L382(2)SEA FILE=EMBASE ABB=ON PLU=ON L381 NOT RH1
L383(5)SEA FILE=EMBASE ABB=ON PLU=ON L374 OR L382
L384(31865)SEA FILE=EMBASE ABB=ON PLU=ON PACLITAXEL OR ANZATAX OR NSC-12
L385(89667)SEA FILE=EMBASE ABB=ON PLU=ON DOXORUBICIN OR ADRIABLASTIN OR
L386(662)SEA FILE=EMBASE ABB=ON PLU=ON DOXOLEM OR (DOXORUBICIN (2A) (H
L387(89699)SEA FILE=EMBASE ABB=ON PLU=ON L385 OR L386
L388(13129)SEA FILE=EMBASE ABB=ON PLU=ON EPIRUBICIN OR (EPI (2A) (ADRIAM
L389(65984)SEA FILE=EMBASE ABB=ON PLU=ON FLUOROURACIL OR FLUOROURACIL-BI
L390(10992)SEA FILE=EMBASE ABB=ON PLU=ON IRINOTECAN OR CAMPTOSAR OR CAMP
L391(24507)SEA FILE=EMBASE ABB=ON PLU=ON VINBLASTINE OR CELLBLASTIN OR V
L392(84300)SEA FILE=EMBASE ABB=ON PLU=ON METHOTREXATE OR AMETHOPTERIN OR
L393(76081)SEA FILE=EMBASE ABB=ON PLU=ON CISPLATIN OR BIOCISPLATINUM OR
L394(1139)SEA FILE=EMBASE ABB=ON PLU=ON VALSPODAR OR PSC 833 OR PSC833
L395(113382)SEA FILE=EMBASE ABB=ON PLU=ON CYCLOPHOSPHAMIDE OR CYCLOPHOSPH
L396(12592)SEA FILE=EMBASE ABB=ON PLU=ON MITOXANTRONE OR MITOXANTRONE (2
L397(5090)SEA FILE=EMBASE ABB=ON PLU=ON TOPOTECAN OR HYCAMTAMINE OR HYC
L398(400)SEA FILE=EMBASE ABB=ON PLU=ON BISANTRENE OR BISANTRENE DIHYDR
L399(300548)SEA FILE=EMBASE ABB=ON PLU=ON (L384 OR L387 OR L388 OR L389 O
L400(100)SEA FILE=EMBASE ABB=ON PLU=ON L378 AND L399
L401(139123)SEA FILE=EMBASE ABB=ON PLU=ON DRUG RESISTANCE+NT/CT
L402(17)SEA FILE=EMBASE ABB=ON PLU=ON L400 AND L401
L403(12)SEA FILE=EMBASE ABB=ON PLU=ON L402 AND PY<=2004
L404(3)SEA FILE=EMBASE ABB=ON PLU=ON L403 AND (L375 OR L376)
L405 6 SEA ABB=ON PLU=ON L383 OR L404

L406 6 SEA ABB=ON PLU=ON L350 OR L405

FILE 'WPIX' ENTERED AT 11:35:50 ON 18 NOV 2008

ACT SRI479WPI1A/A

L407(3269)SEA FILE=WPIX ABB=ON PLU=ON PACLITAXEL
L408(3244)SEA FILE=WPIX ABB=ON PLU=ON DOXORUBICIN
L409(10953)SEA FILE=WPIX ABB=ON PLU=ON L407 OR L408 OR EPIRUBICIN OR 5-F
L410(2141)SEA FILE=WPIX ABB=ON PLU=ON DRUG RESISTANCE
L411(1636)SEA FILE=WPIX ABB=ON PLU=ON DRUG RESISTANT
L412(3233)SEA FILE=WPIX ABB=ON PLU=ON L410 OR L411
L413(97)SEA FILE=WPIX ABB=ON PLU=ON (ISOGENIC OR ISOGENEIC) (5A) CELL
L414(4)SEA FILE=WPIX ABB=ON PLU=ON (ISOGENIC OR ISOGENEIC) (2A) TRAN
L415(3590)SEA FILE=WPIX ABB=ON PLU=ON ADENOCARCINOMA
L416(4)SEA FILE=WPIX ABB=ON PLU=ON L412 AND L413

Serial Number: 10/580,507

L417(1)SEA FILE=WPIX ABB=ON PLU=ON L416 AND DETERMINING/II
L418(6)SEA FILE=WPIX ABB=ON PLU=ON L409 AND L413
L419(5)SEA FILE=WPIX ABB=ON PLU=ON L418 NOT L416
L420(1)SEA FILE=WPIX ABB=ON PLU=ON L419 AND ANEUPLOID/II
L421(4)SEA FILE=WPIX ABB=ON PLU=ON L413 AND L415
L422(1)SEA FILE=WPIX ABB=ON PLU=ON L414 AND DIPLOID/II
L423 7 SEA ABB=ON PLU=ON L417 OR L420 OR L421 OR L422

ACT SRI479WPI2A/A

L424(4940)SEA FILE=WPIX ABB=ON PLU=ON PACLITAXEL OR 7 EPI TAXOL OR ANZA
L425(4289)SEA FILE=WPIX ABB=ON PLU=ON DOXORUBICIN OR ADRIABLASTIN OR AD
L426(181)SEA FILE=WPIX ABB=ON PLU=ON DOXOLEM OR (DOXORUBICIN (2A) (HEX
L427(4290)SEA FILE=WPIX ABB=ON PLU=ON L425 OR L426
L428(772)SEA FILE=WPIX ABB=ON PLU=ON EPIRUBICIN OR (EPI (2A) (ADRIAMYC
L429(3135)SEA FILE=WPIX ABB=ON PLU=ON FLUOROURACIL OR FLUOROURACIL-BIOS
L430(986)SEA FILE=WPIX ABB=ON PLU=ON IRINOTECAN OR CAMPTOSAR OR CAMPTO
L431(1638)SEA FILE=WPIX ABB=ON PLU=ON VINBLASTINE OR CELLBLASTIN OR VIN
L432(3246)SEA FILE=WPIX ABB=ON PLU=ON METHOTREXATE OR AMETHOPTERIN OR (
L433(2910)SEA FILE=WPIX ABB=ON PLU=ON CISPLATIN OR BIOCISPLATINUM OR CI
L434(56)SEA FILE=WPIX ABB=ON PLU=ON VALSPODAR OR PSC 833 OR PSC833
L435(2367)SEA FILE=WPIX ABB=ON PLU=ON CYCLOPHOSPHAMIDE OR CYCLOPHOSPHAM
L436(903)SEA FILE=WPIX ABB=ON PLU=ON MITOXANTRONE OR MITOXANTRONE (2A)
L437(848)SEA FILE=WPIX ABB=ON PLU=ON TOPOTECAN OR Hycamtamine OR Hycam
L438(34)SEA FILE=WPIX ABB=ON PLU=ON BISANTRENE OR BISANTRENE DIHYDROC
L439(12813)SEA FILE=WPIX ABB=ON PLU=ON (L424 OR L427 OR L428 OR L429 OR
L440(107)SEA FILE=WPIX ABB=ON PLU=ON (ISOGENIC OR ISOGENEIC) (7A) CELL
L441(7)SEA FILE=WPIX ABB=ON PLU=ON L439 AND L440
L442(16709)SEA FILE=WPIX ABB=ON PLU=ON (BREAST OR MAMMARY) (2A) (NEOPLAS
L443(5584)SEA FILE=WPIX ABB=ON PLU=ON (UTERINE OR ENDOMETRIAL OR CERVIC
L444(6)SEA FILE=WPIX ABB=ON PLU=ON L440 AND (L442 OR L443)
L445(5)SEA FILE=WPIX ABB=ON PLU=ON L444 NOT L441
L446(4)SEA FILE=WPIX ABB=ON PLU=ON L445 NOT FLUORESCENT/II
L447(2)SEA FILE=WPIX ABB=ON PLU=ON L444 NOT L446
L448 6 SEA ABB=ON PLU=ON L446 OR L447

L449 10 SEA ABB=ON PLU=ON L423 OR L448

FILE 'HCAPLUS' ENTERED AT 11:38:05 ON 18 NOV 2008

L450 16 SEA ABB=ON PLU=ON L43 OR L82

FILE 'BIOSIS' ENTERED AT 11:46:27 ON 18 NOV 2008

ACT SRI479BIO1AU/A

L451(1)SEA FILE=REGISTRY ABB=ON PLU=ON PACLITAXEL/CN
L452(1)SEA FILE=REGISTRY ABB=ON PLU=ON DOXORUBICIN/CN
L453(1)SEA FILE=REGISTRY ABB=ON PLU=ON EPIRUBICIN/CN
L454(1)SEA FILE=REGISTRY ABB=ON PLU=ON 5-FLUOROURACIL/CN
L455(1)SEA FILE=REGISTRY ABB=ON PLU=ON IRINOTECAN/CN
L456(1)SEA FILE=REGISTRY ABB=ON PLU=ON VINBLASTINE/CN
L457(1)SEA FILE=REGISTRY ABB=ON PLU=ON VINBLASTIN/CN
L458(1)SEA FILE=REGISTRY ABB=ON PLU=ON METHOTREXATE/CN
L459(1)SEA FILE=REGISTRY ABB=ON PLU=ON CISPLATIN/CN
L460(1)SEA FILE=REGISTRY ABB=ON PLU=ON VALSPODAR/CN
L461(1)SEA FILE=REGISTRY ABB=ON PLU=ON CYCLOPHOSPHAMIDE/CN
L462(1)SEA FILE=REGISTRY ABB=ON PLU=ON MITOXANTRONE/CN
L463(1)SEA FILE=REGISTRY ABB=ON PLU=ON TOPOTECAN/CN
L464(1)SEA FILE=REGISTRY ABB=ON PLU=ON BISANTRENE/CN
L465(13)SEA FILE=REGISTRY ABB=ON PLU=ON (L451 OR L452 OR L453 OR L454
L466(163678)SEA FILE=BIOSIS ABB=ON PLU=ON L465

Serial Number: 10/580,507

L467(35)SEA FILE=BIOSIS ABB=ON PLU=ON PARISSENTI A?/AU
L468(499)SEA FILE=BIOSIS ABB=ON PLU=ON GUO, B?/AU
L469(268)SEA FILE=BIOSIS ABB=ON PLU=ON VILLENEUVE D?/AU
L470(11)SEA FILE=BIOSIS ABB=ON PLU=ON HEMBRUFF S?/AU
L471(780)SEA FILE=BIOSIS ABB=ON PLU=ON (L467 OR L468 OR L469 OR L470)
L472 23 SEA ABB=ON PLU=ON L466 AND L471

FILE 'EMBASE' ENTERED AT 11:47:24 ON 18 NOV 2008
ACT SRI479EMB1AU/A

L473(1)SEA FILE=REGISTRY ABB=ON PLU=ON PACLITAXEL/CN
L474(1)SEA FILE=REGISTRY ABB=ON PLU=ON DOXORUBICIN/CN
L475(1)SEA FILE=REGISTRY ABB=ON PLU=ON EPIRUBICIN/CN
L476(1)SEA FILE=REGISTRY ABB=ON PLU=ON 5-FLUOROURACIL/CN
L477(1)SEA FILE=REGISTRY ABB=ON PLU=ON IRINOTECAN/CN
L478(1)SEA FILE=REGISTRY ABB=ON PLU=ON VINBLASTINE/CN
L479(1)SEA FILE=REGISTRY ABB=ON PLU=ON VINBLASTIN/CN
L480(1)SEA FILE=REGISTRY ABB=ON PLU=ON METHOTREXATE/CN
L481(1)SEA FILE=REGISTRY ABB=ON PLU=ON CISPLATIN/CN
L482(1)SEA FILE=REGISTRY ABB=ON PLU=ON VALSPODAR/CN
L483(1)SEA FILE=REGISTRY ABB=ON PLU=ON CYCLOPHOSPHAMIDE/CN
L484(1)SEA FILE=REGISTRY ABB=ON PLU=ON MITOXANTRONE/CN
L485(1)SEA FILE=REGISTRY ABB=ON PLU=ON TOPOTECAN/CN
L486(1)SEA FILE=REGISTRY ABB=ON PLU=ON BISANTRENE/CN
L487(13)SEA FILE=REGISTRY ABB=ON PLU=ON (L473 OR L474 OR L475 OR L476
L488(288235)SEA FILE=EMBASE ABB=ON PLU=ON L487
L489(927)SEA FILE=EMBASE ABB=ON PLU=ON (ISOGENIC OR ISOGENEIC) (7A)CELL
L490(139079)SEA FILE=EMBASE ABB=ON PLU=ON DRUG RESISTANCE+NT/CT
L491(1576209)SEA FILE=EMBASE ABB=ON PLU=ON NEOPLASM+NT/CT
L492(89)SEA FILE=EMBASE ABB=ON PLU=ON L488 AND L489
L493(16)SEA FILE=EMBASE ABB=ON PLU=ON L492 AND L490
L494(13)SEA FILE=EMBASE ABB=ON PLU=ON L493 AND L491
L495(9)SEA FILE=EMBASE ABB=ON PLU=ON L494 AND PY<=2004
L496(3)SEA FILE=EMBASE ABB=ON PLU=ON L495 AND (RECENT OR UROEPITHELI
L497(158539)SEA FILE=EMBASE ABB=ON PLU=ON (BREAST OR MAMMARY) (2A) (NEOPL
L498(35856)SEA FILE=EMBASE ABB=ON PLU=ON (UTERINE OR ENDOMETRIAL OR CERV
L499(164648)SEA FILE=EMBASE ABB=ON PLU=ON ANTITUMOR OR ANTICANCER OR ANTI
L500(927)SEA FILE=EMBASE ABB=ON PLU=ON (ISOGENIC OR ISOGENEIC) (7A)CELL
L501(61)SEA FILE=EMBASE ABB=ON PLU=ON L500 AND (L497 OR L498)
L502(8)SEA FILE=EMBASE ABB=ON PLU=ON L501 AND L499
L503(3)SEA FILE=EMBASE ABB=ON PLU=ON L502 NOT (PTEN OR NOVEL OR CHAL
L504(2)SEA FILE=EMBASE ABB=ON PLU=ON L503 NOT RH1
L505(5)SEA FILE=EMBASE ABB=ON PLU=ON L496 OR L504
L506(27)SEA FILE=EMBASE ABB=ON PLU=ON PARISSENTI A?/AU
L507(302)SEA FILE=EMBASE ABB=ON PLU=ON GUO B?/AU
L508(199)SEA FILE=EMBASE ABB=ON PLU=ON VILLENEUVE D?/AU
L509(6)SEA FILE=EMBASE ABB=ON PLU=ON HEMBRUFF S?/AU
L510(513)SEA FILE=EMBASE ABB=ON PLU=ON (L506 OR L507 OR L508 OR L509)
L511(31865)SEA FILE=EMBASE ABB=ON PLU=ON PACLITAXEL OR ANZATAX OR NSC-12
L512(89667)SEA FILE=EMBASE ABB=ON PLU=ON DOXORUBICIN OR ADRIABLASTIN OR
L513(662)SEA FILE=EMBASE ABB=ON PLU=ON DOXOLEM OR (DOXORUBICIN (2A) (H
L514(89699)SEA FILE=EMBASE ABB=ON PLU=ON L512 OR L513
L515(13129)SEA FILE=EMBASE ABB=ON PLU=ON EPIRUBICIN OR (EPI (2A) (ADRIAM
L516(65984)SEA FILE=EMBASE ABB=ON PLU=ON FLUOROURACIL OR FLUOROURACIL-BI
L517(10992)SEA FILE=EMBASE ABB=ON PLU=ON IRINOTECAN OR CAMPTOSAR OR CAMP
L518(24507)SEA FILE=EMBASE ABB=ON PLU=ON VINBLASTINE OR CELLBLASTIN OR V
L519(84300)SEA FILE=EMBASE ABB=ON PLU=ON METHOTREXATE OR AMETHOPTERIN OR
L520(76081)SEA FILE=EMBASE ABB=ON PLU=ON CISPLATIN OR BIOCISPLATINUM OR
L521(1139)SEA FILE=EMBASE ABB=ON PLU=ON VALSPODAR OR PSC 833 OR PSC833

Serial Number: 10/580,507

L522(113382)SEA FILE=EMBASE ABB=ON PLU=ON CYCLOPHOSPHAMIDE OR CYCLOPHOSPH
L523(12592)SEA FILE=EMBASE ABB=ON PLU=ON MITOXANTRONE OR MITOXANTRONE (2
L524(5090)SEA FILE=EMBASE ABB=ON PLU=ON TOPOTECAN OR HYCAMTAMINE OR HYC
L525(400)SEA FILE=EMBASE ABB=ON PLU=ON BISANTRENE OR BISANTRENE DIHYDR
L526(300548)SEA FILE=EMBASE ABB=ON PLU=ON (L511 OR L514 OR L515 OR L516 O
L527(100)SEA FILE=EMBASE ABB=ON PLU=ON L500 AND L526
L528(139123)SEA FILE=EMBASE ABB=ON PLU=ON DRUG RESISTANCE+NT/CT
L529(17)SEA FILE=EMBASE ABB=ON PLU=ON L527 AND L528
L530(12)SEA FILE=EMBASE ABB=ON PLU=ON L529 AND PY<=2004
L531(3)SEA FILE=EMBASE ABB=ON PLU=ON L530 AND (L497 OR L498)
L532(6)SEA FILE=EMBASE ABB=ON PLU=ON L505 OR L531
L533(17)SEA FILE=EMBASE ABB=ON PLU=ON L510 AND L526
L534(15)SEA FILE=EMBASE ABB=ON PLU=ON L533 NOT L529
L535(3)SEA FILE=EMBASE ABB=ON PLU=ON L534 AND L528
L536(3)SEA FILE=EMBASE ABB=ON PLU=ON L535 NOT L532
L537 2 SEA ABB=ON PLU=ON L536 NOT REVERSAL

ACT SRI479EMB2AU/A

L538(27)SEA FILE=EMBASE ABB=ON PLU=ON PARISSENTI A?/AU
L539(302)SEA FILE=EMBASE ABB=ON PLU=ON GUO B?/AU
L540(199)SEA FILE=EMBASE ABB=ON PLU=ON VILLENEUVE D?/AU
L541(6)SEA FILE=EMBASE ABB=ON PLU=ON HEMBRUFF S?/AU
L542(513)SEA FILE=EMBASE ABB=ON PLU=ON (L538 OR L539 OR L540 OR L541)
L543(31865)SEA FILE=EMBASE ABB=ON PLU=ON PACLITAXEL OR ANZATAX OR NSC-12
L544(89667)SEA FILE=EMBASE ABB=ON PLU=ON DOXORUBICIN OR ADRIABLASTIN OR
L545(662)SEA FILE=EMBASE ABB=ON PLU=ON DOXOLEM OR (DOXORUBICIN (2A) (H
L546(89699)SEA FILE=EMBASE ABB=ON PLU=ON L544 OR L545
L547(13129)SEA FILE=EMBASE ABB=ON PLU=ON EPIRUBICIN OR (EPI (2A) (ADRIAM
L548(65984)SEA FILE=EMBASE ABB=ON PLU=ON FLUOROURACIL OR FLUOROURACIL-BI
L549(10992)SEA FILE=EMBASE ABB=ON PLU=ON IRINOTECAN OR CAMPTOSAR OR CAMP
L550(24507)SEA FILE=EMBASE ABB=ON PLU=ON VINBLASTINE OR CELLBLASTIN OR V
L551(84300)SEA FILE=EMBASE ABB=ON PLU=ON METHOTREXATE OR AMETHOPTERIN OR
L552(76081)SEA FILE=EMBASE ABB=ON PLU=ON CISPLATIN OR BIOCISPLATINUM OR
L553(1139)SEA FILE=EMBASE ABB=ON PLU=ON VALSPODAR OR PSC 833 OR PSC833
L554(113382)SEA FILE=EMBASE ABB=ON PLU=ON CYCLOPHOSPHAMIDE OR CYCLOPHOSPH
L555(12592)SEA FILE=EMBASE ABB=ON PLU=ON MITOXANTRONE OR MITOXANTRONE (2
L556(5090)SEA FILE=EMBASE ABB=ON PLU=ON TOPOTECAN OR HYCAMTAMINE OR HYC
L557(400)SEA FILE=EMBASE ABB=ON PLU=ON BISANTRENE OR BISANTRENE DIHYDR
L558(300548)SEA FILE=EMBASE ABB=ON PLU=ON (L543 OR L546 OR L547 OR L548 O
L559 17 SEA ABB=ON PLU=ON L542 AND L558

L560 17 SEA ABB=ON PLU=ON L537 OR L559

FILE 'HCAPLUS' ENTERED AT 11:50:38 ON 18 NOV 2008

ACT SRI479HCA1AU/A

L561(1)SEA FILE=REGISTRY ABB=ON PLU=ON PACLITAXEL/CN
L562(1)SEA FILE=REGISTRY ABB=ON PLU=ON DOXORUBICIN/CN
L563(1)SEA FILE=REGISTRY ABB=ON PLU=ON EPIRUBICIN/CN
L564(1)SEA FILE=REGISTRY ABB=ON PLU=ON IRINOTECAN/CN
L565(1)SEA FILE=REGISTRY ABB=ON PLU=ON VINBLASTINE/CN
L566(1)SEA FILE=REGISTRY ABB=ON PLU=ON METHOTREXATE/CN
L567(1)SEA FILE=REGISTRY ABB=ON PLU=ON CISPLATIN/CN
L568(1)SEA FILE=REGISTRY ABB=ON PLU=ON VALSPODAR/CN
L569(1)SEA FILE=REGISTRY ABB=ON PLU=ON CYCLOPHOSPHAMIDE/CN
L570(1)SEA FILE=REGISTRY ABB=ON PLU=ON MITOXANTRONE/CN
L571(1)SEA FILE=REGISTRY ABB=ON PLU=ON TOPOTECAN/CN
L572(1)SEA FILE=REGISTRY ABB=ON PLU=ON BISANTRENE/CN
L573(12)SEA FILE=REGISTRY ABB=ON PLU=ON (L561 OR L562 OR L563 OR L564

Serial Number: 10/580,507

L574(1)SEA FILE=REGISTRY ABB=ON PLU=ON 5-FLUOROURACIL/CN
L575(13)SEA FILE=REGISTRY ABB=ON PLU=ON L573 OR L574
L576(92104)SEA FILE=HCAPLUS ABB=ON PLU=ON L575
L577(32)SEA FILE=HCAPLUS ABB=ON PLU=ON PARISSENTI A?/AU
L578(2209)SEA FILE=HCAPLUS ABB=ON PLU=ON GUO, B?/AU
L579(401)SEA FILE=HCAPLUS ABB=ON PLU=ON VILLENEUVE, D?/AU
L580(7)SEA FILE=HCAPLUS ABB=ON PLU=ON HEMBRUFF S?/AU
L581(2625)SEA FILE=HCAPLUS ABB=ON PLU=ON (L577 OR L578 OR L579 OR L580)
L582(20)SEA FILE=HCAPLUS ABB=ON PLU=ON L576 AND L581
L583 12 SEA ABB=ON PLU=ON L582 AND (PRY<=2004 OR AY<=2004 OR
PY<=2004)

FILE 'MEDLINE' ENTERED AT 11:52:01 ON 18 NOV 2008
ACT SRI479MED1AU/A

L584(1)SEA FILE=REGISTRY ABB=ON PLU=ON PACLITAXEL/CN
L585(1)SEA FILE=REGISTRY ABB=ON PLU=ON DOXORUBICIN/CN
L586(1)SEA FILE=REGISTRY ABB=ON PLU=ON EPIRUBICIN/CN
L587(1)SEA FILE=REGISTRY ABB=ON PLU=ON 5-FLUOROURACIL/CN
L588(1)SEA FILE=REGISTRY ABB=ON PLU=ON IRINOTECAN/CN
L589(1)SEA FILE=REGISTRY ABB=ON PLU=ON VINBLASTINE/CN
L590(1)SEA FILE=REGISTRY ABB=ON PLU=ON VINBLASTIN/CN
L591(1)SEA FILE=REGISTRY ABB=ON PLU=ON METHOTREXATE/CN
L592(1)SEA FILE=REGISTRY ABB=ON PLU=ON CISPLATIN/CN
L593(1)SEA FILE=REGISTRY ABB=ON PLU=ON VALSPODAR/CN
L594(1)SEA FILE=REGISTRY ABB=ON PLU=ON CYCLOPHOSPHAMIDE/CN
L595(1)SEA FILE=REGISTRY ABB=ON PLU=ON MITOXANTRONE/CN
L596(1)SEA FILE=REGISTRY ABB=ON PLU=ON TOPOTECAN/CN
L597(1)SEA FILE=REGISTRY ABB=ON PLU=ON BISANTRENE/CN
L598(13)SEA FILE=REGISTRY ABB=ON PLU=ON (L584 OR L585 OR L586 OR L587
L599(138826)SEA FILE=MEDLINE ABB=ON PLU=ON L598
L600(27)SEA FILE=MEDLINE ABB=ON PLU=ON PARISSENTI A?/AU
L601(399)SEA FILE=MEDLINE ABB=ON PLU=ON GUO, B?/AU
L602(234)SEA FILE=MEDLINE ABB=ON PLU=ON VILLENEUVE, D?/AU
L603(6)SEA FILE=MEDLINE ABB=ON PLU=ON HEMBRUFF S?/AU
L604(645)SEA FILE=MEDLINE ABB=ON PLU=ON (L600 OR L601 OR L602 OR L603)
L605 8 SEA ABB=ON PLU=ON L599 AND L604

FILE 'WPIX' ENTERED AT 11:52:27 ON 18 NOV 2008
ACT SRI479WPI1AU/A

L606(3269)SEA FILE=WPIX ABB=ON PLU=ON PACLITAXEL
L607(3244)SEA FILE=WPIX ABB=ON PLU=ON DOXORUBICIN
L608(10953)SEA FILE=WPIX ABB=ON PLU=ON L606 OR L607 OR EPIRUBICIN OR 5-F
L609(3)SEA FILE=WPIX ABB=ON PLU=ON PARISSENTI A?/AU
L610(706)SEA FILE=WPIX ABB=ON PLU=ON GUO, B?/AU
L611(5)SEA FILE=WPIX ABB=ON PLU=ON VILLENEUVE D?/AU
L612(1)SEA FILE=WPIX ABB=ON PLU=ON HEMBRUFF S?/AU
L613(712)SEA FILE=WPIX ABB=ON PLU=ON (L609 OR L610 OR L611 OR L612)
L614 2 SEA ABB=ON PLU=ON L608 AND L613

L615 52 DUP REMOVE L450 L139 L326 L406 L449 (9 DUPLICATES REMOVED)

FILE 'HCAPLUS' ENTERED AT 12:27:05 ON 18 NOV 2008
D QUE L583

L616 10 SEA ABB=ON PLU=ON L583 NOT L450

Serial Number: 10/580,507

FILE 'MEDLINE' ENTERED AT 12:28:59 ON 18 NOV 2008

D QUE L616

D QUE L605

L617 6 SEA ABB=ON PLU=ON L605 NOT L139

FILE 'BIOSIS' ENTERED AT 12:31:42 ON 18 NOV 2008

D QUE L472

L618 21 SEA ABB=ON PLU=ON L472 NOT L326

FILE 'EMBASE' ENTERED AT 12:32:17 ON 18 NOV 2008

D QUE L560

L619 16 SEA ABB=ON PLU=ON L560 NOT L406

FILE 'WPIX' ENTERED AT 12:33:02 ON 18 NOV 2008

D QUE L614

L620 1 SEA ABB=ON PLU=ON L614 NOT L449

L621 33 DUP REMOVE L616 L617 L618 L619 L620 (21 DUPLICATES REMOVED)